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# World Financial Markets

*Morgan Guaranty Trust Company of New York*

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## *Non-oil commodity prices: trends and implications*

Non-oil commodity prices have risen substantially since the beginning of this year. By August, the *Economist* dollar index of commodity prices (which excludes oil and precious metals)* had risen by 19% from December 1986, and nearly 23% above its low of August 1986 (see Chart 1). With food and beverage commodity prices down slightly since end-1986, the increase in the overall index came from a rise in industrial raw material prices, with metals up about 38% and nonfood agricultural commodities up 32%.

Financial markets have focused on the implications of the recent upturn for inflation and interest rates. Monetary authorities in several major countries have expressed concern, and some members of the Federal Reserve Board indicated the rise in commodity prices was a consideration in their moderate tightening of policy earlier this year. Although farmers have little to cheer about, producers of industrial commodities, especially metals, are hoping for relief from the relentless decline in prices that began in the early 1980s; by early 1987 that decline had brought many prices in real terms, that is relative to world manufactures prices, to their lowest point since the Great Depression. For primary-commodity-exporting countries, the prolonged fall in commodity prices that preceded the recent upturn severely depressed their terms of trade, setting back growth and development, and contributed to the debt-servicing difficulties.

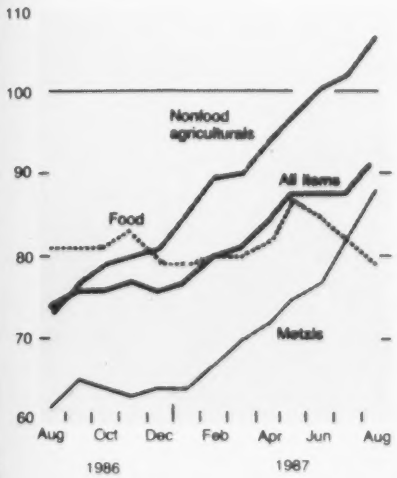
This year's upturn in industrial raw material prices may signal a shift in inflation expectations, but it does not represent the onset of sustained, cost-push pressures arising from the world's commodity producers. The fundamental demand/

Chart 1

*Nominal non-oil commodity prices*

Economist *dollar index*

*1980 = 100*




*The *Economist* all-items dollar index is based on spot prices for 31 commodities, weighted according to the value of OECD imports (excluding intra-EC trade in commodities affected by the common agricultural policy) in 1981-83. Some other widely used non-oil commodity price indices give a different reading on the extent of this year's price increase, reflecting alternative commodity baskets and weights. For example, the Commodity Research Bureau spot market index, which covers 23 commodities that are weighted equally, rose 11% in the first eight months of this year. The IMF index of nonfuel primary commodity prices in dollar terms, which covers 34 commodities (iron ore, tobacco, and phosphate rock, in addition to those included in the *Economist* index) and is weighted according to shares in 1979-81 world export earnings, shows an increase of 8% between December 1986 and July 1987. Using weights based on developing-country exports only, the increase was less than 4%, compared with 12% with industrial-country export weights. Much of this difference stems from substantially larger weights in the developing-country index for beverages and sugar, prices of which have been particularly weak.

supply imbalances that have depressed primary commodity prices since 1980 still are present, if somewhat diminished in the case of metals. Prices of food commodities — especially grains, oilseeds, and sugar — are likely to continue falling in real terms until there are major changes in industrial countries' farm support programs, which have generated huge domestic surpluses and intense price competition for export markets. For metals, considerable excess capacity still exists to keep a lid on prices, even though a gradual working down of excessive inventories and an absence of significant net additions to world capacity in recent years has made the outlook less bleak. Moreover, modest industrial-country economic growth, shifts in structure of these economies, and changes in technology will continue to dampen demand for most industrial raw materials, while lowering and flattening supply curves. Thus, even though higher current industrial raw material prices may be sustained for a while, the medium-term outlook is for no better than a leveling out of average prices in real terms.

This outlook is hardly encouraging for commodity-dependent countries. They will have to continue adjusting to deteriorating, or at best stagnant, terms of trade. As individual producers, they could each try to exploit their respective comparative advantage by increasing the efficiency and volume of primary commodity output and enlarging export market shares, but in the aggregate this tends to perpetuate excess supply conditions and further depress prices. Reduction of dependence on commodities through diversification into production and export of manufactures represents a desirable course of action. However, this avenue will not guarantee strong export-led growth, as newcomers will face a crowded field of established industrial-country and NIC competitors as well as like-minded diversifiers. New developing-country exporters of manufactures also face protectionist barriers in industrial-country and NIC markets. Nonetheless, the diversification effort should prove worthwhile, as it has for countries that previously moved in this direction. The outward-looking policies required, including increased reliance on market signals, are likely to improve the efficiency of resource allocation within their economies, thereby enhancing growth prospects.

While self-help efforts are indispensable, growth prospects and external payments performance of commodity-dependent developing countries will continue to hinge heavily on the macroeconomic and farm policies of the major industrial countries. Stronger and better-balanced economic growth and agricultural policy reforms in industrial countries would trim unemployment, narrow trade imbalances, and reduce the high costs of farm support programs to taxpayers and consumers, as well as benefit commodity-dependent developing countries.

### *Perspective on recent price developments*

A number of factors contributed to the recent run-up in non-oil commodity prices, which has been confined to industrial raw materials. A general rise in inflation expectations triggered speculative buying and inventory accumulation of precious metals as well as industrial raw materials in anticipation of future price increases. Inflation expectations have been affected by the partial recovery of oil prices over the past year — initially in response to OPEC efforts to limit production and more recently in reaction to the intensification of Middle East political tensions. The rise in

*Table 1*

### *World stocks of major agricultural commodities*

*as percent of consumption*

| | Average 1975-1980 | 1985 | 1986 | Proj. 1987 |
|---|---|---|---|---|
| *Major oilseeds* | 13 | 17 | 19 | 18 |
| *Coarse grains* | 13 | 24 | 28 | 26 |
| *Wheat* | 21 | 28 | 29 | 30 |
| *Sugar* | 30 | 45 | 43 | 42 |

*Table 2*

### *World metal stocks*

*as percent of consumption*

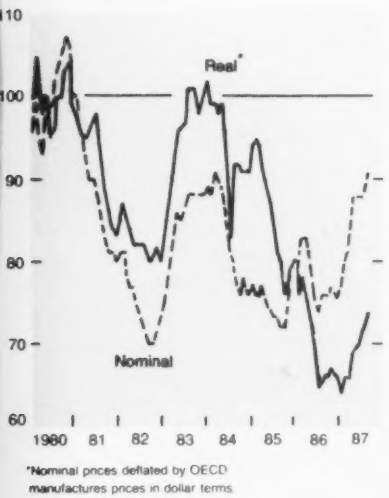
| | 1980 | 1982 | 1985 | 1986 |
|---|---|---|---|---|
| *Primary aluminum* | 14 | 23 | 15 | 12 |
| *Refined copper* | 11 | 18 | 11 | 9 |
| *Nickel* | 29 | 31 | 16 | 16 |
| *Tin* | 6 | 26 | 32 | 24 |
| *Zinc* | 12 | 13 | 9 | 9 |

*Chart 2*

### *Non-oil commodity prices*

Economist *all items dollar index*

*1980 = 100*




*Nominal prices deflated by OECD manufactures prices in dollar terms

commodity price indices themselves also appears to have reinforced inflation expectations. In North America concerns that falling unemployment and rising industrial capacity utilization rates portend tightness in certain labor and product markets increase inflation anxieties. Another key influence has been dollar depreciation. In addition to its price-boosting effects in the United States, the dollar's decline lowered local-currency costs of commodities priced in dollars for European and Japanese consumers, thereby tending to boost demand.

The major difference in inventory positions between foods and metals makes prices of the latter much more sensitive to short-term shifts in demand. World food stocks have reached record high levels, far in excess of normal working and reserve requirements (see Table 1). In contrast, surplus stocks of most nonferrous metals that accumulated in the 1981-82 recession gradually have been worked off over the past three years (see Table 2). Some of the latest drawdowns in producer stocks of metals, however, may represent shifts to industrial user inventories, rather than declines in overall stocks.

Reduced stock levels have made metal prices particularly sensitive to several recent temporary supply disruptions. Strikes in North America this year have reduced the output of lead, zinc, and copper from a few large mines and smelters. Other labor disputes are pending. Temporary supply factors also have affected world stocks and prices of nonfood agricultural raw materials during the past crop year. For example, poor weather in South and Southeast Asia lowered output of jute and rubber, causing supply tightness in both markets. World acreage and production of cotton fell sharply, largely in response to earlier record stocks and low prices, while world demand has been unexpectedly strong, reflecting shifts in consumer preferences toward natural fibers as well as the same low prices. Spot prices for a number of industrial raw materials, especially metals, cotton, and lumber, are substantially above long-dated futures prices, suggesting markets ascribe some of the recent run-up to temporary factors and expect higher prices to lead to reactivation of idle production capacity.

Recent non-oil commodity price developments also should be put into a longer-term perspective (see Chart 2). Despite this year's 19% rise, prices still are more than 9% below their average level in 1980, and relative to world manufactures prices are virtually unchanged from last year's average level and close to 26% below that of 1980. Metals prices are more than 12% lower than in 1980, although agricultural raw material prices, on the strength of recent rises in cotton, wool, and timber, are now 7% above their 1980 peak. In relation to world manufactures prices, metals prices are about 28% below their average level in 1980, and those of agricultural raw materials are down 13% from the beginning of the decade. After rising briefly earlier this year, the dollar prices for food commodities fell to their lowest level since 1982 and now stand more than 20% below the 1980 peak in nominal terms and nearly 36% lower in real terms.

Underlying the weakness of commodity prices during the 1980s has been sluggish demand and abundant supply. World consumption of nonfuel primary commodities grew only 1.5% a year during 1980-86, or about half the rate recorded during the 1970s. This reduced consumption growth can be ascribed partly to lower rates of economic growth during the 1980s. OECD real GNP growth slowed to an average 2.3% per annum, from 3.4% in the 1970s

Table 3

*Economic growth and commodity consumption*

*average annual percent change*

| | 1970-79 | 1980-86 |
|---|---|---|
| *Real GNP growth* | | |
| *Industrial countries* | 3.4 | 2.3 |
| *United States* | 2.8 | 2.2 |
| *Japan* | 5.2 | 3.8 |
| *Europe* | 3.3 | 1.6 |
| *Developing countries* | 6.0 | 3.3 |
| *World consumption of nonfuel primary commodities** | 3.1 | 1.5 |
| *Food commodities* | 3.9 | 2.0 |
| *Beverages* | 1.3 | 1.4 |
| *Agricultural raw materials* | 2.1 | 2.4 |
| *Metals* | 3.6 | 0.0 |

*Weighted by importance in world trade.
Source: IMF, *Primary Commodities*, May 1987.

Table 4

*Capacity utilization in primary metals*

*percent*

| | Annual averages | | | |
|---|---|---|---|---|
| | 1977-1981 | 1982-1983 | 1984-1986 | Latest 1987 |
| *United States* | | | | |
| *Mining* | 91 | 81 | 81 | 76 Jul |
| *Nonferrous metals* | 83 | 68 | 80 | 80 Jun |
| *Iron and steel* | 81 | 53 | 66 | 68 Jun |
| *Canada* | 88 | 65 | 76 | 78 Q1 |
| *European Community* | n.a. | n.a. | 78 | 78 Q1 |
| *Germany* | n.a. | 68 | 81 | 79 Q2 |

(see Table 3); and, on present policies, is unlikely to average better than 2.5% for the remainder of the decade. This lower growth has particularly affected demand for primary metals and minerals, of which industrial countries account for close to three-quarters of world imports. Likewise, a reduction in developing country economic expansion from an average of 6% annually in the 1970s to 3.3% thus far in the 1980s has slowed primary commodity consumption growth.

Continued reduction in the intensity of use of industrial commodities also has dampened demand, especially for metals. World consumption of metals was no higher in 1986 than in 1979, even though OECD real GNP increased by 16% over that period. This was partly a response to high real prices of non-oil commodities and sharp increases in energy costs during the 1970s, as well as to concerns about the depletion of natural resources.

World supply of nonfuel primary commodities grew by 2.1% annually during 1980-86, equaling the rate of increase in the previous decade and outpacing the average rate of consumption growth by nearly 40%. Continued heavy commitment of resources to agricultural production, despite sluggish world demand, nearly doubled world stocks of food commodities during 1980-86. By and large, the problem is centered in the industrial economies where farm policies severely distort markets, although increased food output in the three most heavily populated developing countries — China, India, and Indonesia — during the 1980s led to near self-sufficiency and contributed to global food surpluses.

In metals and minerals, strong demand and high prices in the 1970s induced large investment in additional capacity worldwide, much of which was just coming on stream when industrial-country growth slowed abruptly during 1981-82 and demand for metals fell. As a result, capacity utilization rates in metals industries dropped sharply (see Table 4). Continued weak demand and low prices forced considerable restructuring and rationalization of existing capacity, particularly in North America, but also spurred more efficient production technologies in both new and old facilities. Moreover, some mine and plant closures were only temporary. On balance, production costs of most metals are significantly lower than in 1980, and global capacity continues to expand albeit much more slowly than in the 1970s.

### *Maturing industrial economies*

Structural shifts within industrial countries related to high incomes and advanced stages of development have been key factors behind the slowing demand for many commodities. In these economies, which account for a large portion of world industrial raw material consumption, the share of industrial production in GDP declined from 40% to 36% during the past 20 years as the importance of services increased. Manufacturing output alone fell from 30% to 23% of GDP; moreover, within manufacturing, output has shifted away from traditional raw-materials-intensive sectors toward high technology and information-based products. These shifts in the composition of aggregate output have lowered demand growth for most industrial commodities relative to overall economic growth.

Demand for food and certain other commodities is approaching saturation levels in the industrial countries. For example, per capita food consumption in the United States has risen only 0.5% annually over the past 15 years despite 1.7% annual growth in real per capita in-

Chart 3

*U.S. food consumption and real GNP, per capita*

1970 = 100

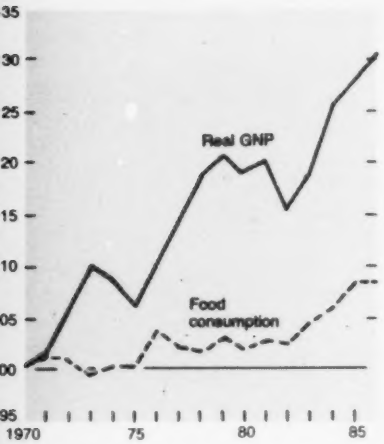
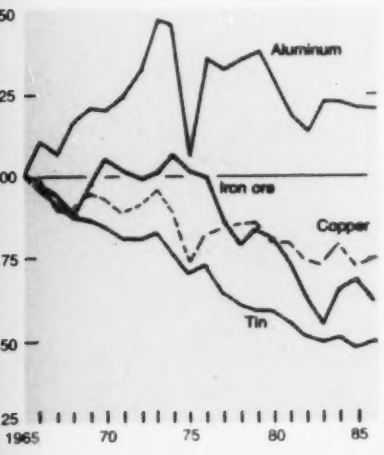



Chart 4

*Intensity of metals use*

*world consumption per unit of GNP*

1965 = 100




come (see Chart 3). By the 1980s, the same sluggish growth trend in per capita food consumption prevailed in most other industrial economies. Looking forward, demand growth will continue to depend mainly on population growth, which in industrial countries has already declined from an average of 0.9% a year between 1965 and 1980 to 0.6% thus far in the 1980s, and is projected to slow further.

### *Technological change*

Because of its effects on both demand and supply, technological change is perhaps the single most important factor affecting commodity markets. Looking at the impact on demand, several dimensions stand out. First, new materials have effected broad substitution away from traditional commodities, particularly metals. Materials substitution has been driven both by cost and technical factors that affect product quality and performance. With lower weight and often higher strength, plastics and composite materials have replaced steel, copper, and other metals in many end-uses ranging from construction and packaging to transportation. Common but important examples inciude PVC pipes in place of copper for plumbing, and plastics instead of steel in automobile body panels and bumpers. Optical fibers outperform copper in telecommunication cables. Some advanced materials contain metals but often in low volume, such as in ceramics, various composites, and metallic alloys.

Synthetics likewise have slowed the demand for many agricultural products, more nonfood than food. Man-made substances have replaced cotton, wool, and other natural fibers; nylon has substituted for rubber in tires; and artificial sweeteners have made inroads in the sugar market. However, innovations such as the stay-pressed process for cotton fabrics and new weaves and blends for wool and cotton textiles have partly reversed this type of substitution.

Second, demand for commodities also has been lessened by new materials-saving technologies in production processes and by improved products that contain reduced amounts of primary inputs for the same quantity of final output, often with better quality. For example, tin-plating thicknesses have been reduced and new steel-making techniques afford higher yields and less waste. Changing product characteristics and widespread downsizing are illustrated by major efforts in the automobile industry since the first oil shock to reduce weight in order to raise energy efficiency. The weight of the average U.S.-produced automobile has decreased 15%, or 550 pounds, since 1974 mostly through downsizing but also through the use of advanced high-strength, low-alloy steels and plastics in place of carbon steel. While downsizing may be reaching limits, an even larger weight reduction is projected over the next five years with increased use of lighter materials that use less primary inputs.

Finally, improved technologies for secondary recovery also have cut into demand for primary output of many minerals and metals. Examples include the electric arc furnace (EAF) steel-making process that uses mainly sponge iron and scrap as feedstock rather than iron ore, and new processes for recycling aluminum that achieve purity levels nearly equal to those found in primary production. The impact of these technological changes, together with the effects of structural demand shifts in maturing economies, are the major factors in the declining intensity of use of metals and minerals (see Chart 4).

*Table 5*

### *World grain yields*

*tons per hectare; average for period*

| | 1961-65 | 1971-75 | 1981-85 |
|---|---|---|---|
| *Wheat* | 1.2 | 1.6 | 2.1 |
| *Coarse grains* | 1.4 | 1.9 | 2.3 |
| *Rice (paddy)* | 2.0 | 2.4 | 3.1 |
| *Total grains, weighted average* | 1.3 | 1.8 | 2.2 |

Turning to supply, technological change has been a driving force behind increases in productivity, and thus lower costs, in the production of many commodities ranging from metals to agricultural. New technologies have raised the efficiency in the extraction and production of most metals, contributing to lower and flatter industry supply curves. For example, a solvent extraction/electrowinning process produces refined copper from low-grade ores at about half the cost of the conventional concentrating/smelting method. In the steel industry, increased use of new processes such as continuous casting, direct reduction, and EAF have significantly raised yields and lowered costs, saving not only materials but also energy and manpower.

Technological change in agriculture historically has shifted supply curves outward. Significant in recent decades has been the continual development and application of improved varieties and chemical inputs that boosted yields and reduced costs in most field and tree crops and in livestock. World grain yields, for example, increased by 24% between the first halves of the 1970s and 1980s, following a 31% rise the preceding decade (see Table 5). Efficiency gains in livestock production in industrial countries have been even greater. In U.S. agriculture, productivity growth alone has outpaced food consumption during the past two decades.

Wider application of existing technologies will continue to affect world commodity markets for some time. Despite considerable restructuring in world metals industries in recent years, large scope remains for upgrading of remaining high-cost capacity. Moreover, the transfer of new materials technologies to developing countries, even with a lag, will change fundamentally patterns of demand for some metals as their economies grow and develop — so-called leapfrogging. China's joint venture to produce optical fiber cables suggests the intensity of copper use there will never reach the levels attained in the industrial countries at similar stages of development. In agriculture, the transfer of existing technologies has been extensive in some crops and some regions, but much of Africa and some Asian countries including China have yet to adopt modern farm technologies on a large scale.

Technological change, of course, is an ongoing process which, if anything, could accelerate. New developments in materials science and commercial applications in processes and products will lead to further substitution away from metals. The recent advances in superconductivity offer the potential to transform certain metals-consuming industries ranging from power generation and transmission to transportation, although large-scale commercial applications seem some years away. In agriculture, traditional research methods will continue to raise productivity through products such as recently developed hybrid cotton with a much shorter growing season that promises to revolutionize the industry. However, the greatest potential in agricultural research lies in the new biotechnology fields. The commercial impact of these emerging technologies has already begun in products such as growth hormones that boost milk yields by 20%. For field crops, the potential reportedly will take longer to develop; in the meantime, yield increases for major crops are expected to keep pace with historical trends. However, the U.S. Office of Technology Assessment projects that over the next 30 years the emerging technologies will help raise productivity growth in U.S. agriculture above the 1.5% average annual rate of the past 20 years.

*Table 6*

**European Community net imports**

*minus sign indicates net exports*

| | Annual averages | | |
|---|---|---|---|
| | 1970-71 | 1980-81 | 1985-86 |
| *In million metric tons* | | | |
| Total grains | 18.0 | 4.1 | —15.6 |
| Sugar | 1.0 | —3.5 | —2.7 |
| *As percent of world imports* | | | |
| Total grains | 16 | 2 | —8 |
| Sugar | 6 | —15 | —12 |

*Table 7*

**Domestic producer and consumer prices relative to world prices, 1980-82**

*weighted average prices for 7 major farm commodities, world market prices = 100*

| | Producer prices | Consumer prices |
|---|---|---|
| Australia | 104 | 109 |
| Canada | 117 | 116 |
| European Community | 154 | 156 |
| Other Europe | 184 | 181 |
| Japan | 244 | 208 |
| New Zealand | 100 | 100 |
| United States | 116 | 117 |
| Industrial-country average | 140 | 143 |

Source: World Bank.

### Policy interventions

World agricultural markets have been particularly distorted by policy interventions in industrial countries, to the point that world prices for some commodities are driven more by political than market considerations. Government price-support and protection policies, designed largely to stabilize and enhance farm incomes, have encouraged excess production and inhibited the transfer of resources out of agriculture into other sectors. The resulting overproduction and overcapacity have led to large surpluses and depressed prices. Indeed, the recent, intense competition for export markets via subsidies has pushed world prices of many food commodities well below the production costs of even the most efficient producers.

Apart from depressing world prices, farm support programs in the industrial countries have distorted world trade. A prime example is the European Community, which had been a large net importer of most foods in the 1960s but became a net exporter of many agricultural commodities in the 1980s (see Table 6). This shift came at the expense of more efficient producers in the rest of the world, including many developing countries with true comparative advantage in agriculture.

While farmers in industrial countries have benefited from support programs, taxpayers and consumers have borne the costs. The direct budgetary costs of farm price and income support in Japan, the EC, and the United States reached record highs last year, a combined total exceeding $60 billion, up from $23 billion in 1980. The burden on consumers, which varies according to the actual methods of farm support, has been highest in Europe and Japan where variable import levies and other import barriers keep domestic prices well above world prices. This has depressed the domestic demand for some commodities such as dairy products, sugar, and beef whose consumer prices ranged two to four times higher than world prices. In contrast, consumer prices of food in the United States are mostly in line with world prices. Table 7 illustrates the relative levels of price distortions to producers and consumers in the industrial countries in 1980-82.

The sharp rise in budgetary outlays for farm support programs during the 1980s, and the increased trade friction among industrial countries resulting from ever-higher agricultural surpluses, have focused attention on the need for reform. The EC recently lowered some price support levels slightly, and, under great pressure from the United States and other exporters, shelved a proposal to tax edible oils that would have increased protective barriers substantially. However, the measures taken to date by the EC have been modest. Even with the slight reduction in price supports, the EC Commission has projected that within five years grain stocks will increase threefold to 100 million tons. EC production controls apply only to dairy and sugar. In its Food Security Act of 1985, the United States set progressively lower commodity-loan rates and thus market prices over a five-year period to stimulate exports and reduce burdensome stocks. It also increased acreage-set-aside requirements to reduce production and further stock buildup. But the legislation maintained deficiency payments to support farm incomes, which encouraged resources to remain in the sector. The net effects of the changes were to increase budgetary costs while lowering stocks and production somewhat. By effectively lowering world prices, the U.S. farm legislation has raised the budgetary and opportunity costs of EC and

Japanese farm programs.

Recognition of the need for agricultural reform led to an agreement for negotiations in the GATT Uruguay Round to improve the competitive environment in agriculture by increasing discipline in the use of subsidies. The G-7 participants reaffirmed their commitment to reform at the Venice summit, calling for cuts in farm support to allow market signals to influence the orientation of agricultural production. In July, the United States accelerated the discussion in a proposal to GATT to eliminate all subsidies and protection in world agriculture by the year 2000.

Yet, despite the pressures and rhetoric for reform, resistance to change is strong and the upcoming negotiations are likely to yield only slow progress at best. Those countries with inefficient farm sectors and high protection levels that would face major structural adjustments under reform are predictably the most resistant. For example, the EC insists on maintaining producer subsidies and a dual price system that insulates consumers from world prices. A major issue for the Community is the fact that structural adjustment would exacerbate the already high unemployment problem because 9% of the labor force is engaged in agriculture, versus less than 3% in the United States. Judging from reactions to the U.S. proposal, the risk is that current levels of farm support and protection might be locked in rather than reduced over time. A recent OECD report on agricultural policies and trade concluded that, in the absence of policy reforms or successive weather failures, "markets for the major temperate zone agricultural products will be characterized by widespread and lasting surpluses over the next ten years."

In contrast, agricultural policies in the developing countries have generally discouraged production and encouraged resources to leave the agricultural sectors, resulting in increased import dependence for food and fiber despite natural comparative advantage in production in many instances. The most prevalent bias against farmers has come through government purchase and distribution of food at low prices in the interest of their urban consumers. Likewise, producer returns for export crops in some countries have been depressed by export taxes or the operations of marketing boards. In addition, protectionist policies designed to promote industrialization and persistent overvaluation of exchange rates in many developing economies have helped to turn the internal terms of trade against their agricultural sectors. As a partial offset, governments often have subsidized farm inputs and invested in rural infrastructure, most importantly in irrigation.

There have been exceptions, however. After years of rigid controls in agriculture, China shifted to an incentives policy in 1978 that reformed the organization, pricing and marketing, and labor allocation within the rural areas, and quickly resulted in sharp production increases of all crops. Most growth came through higher productivity of land and labor largely by using existing resources more efficiently, not through new technologies. In India and Indonesia, more gradual but nevertheless supportive agricultural and macroeconomic policies — high levels of public investment in infrastructure and green revolution technologies, rational price policies, and appropriate exchange rate policies — increased output and reduced costs of basic foodgrains and many export commodities. In the aggregate, these three countries which had been large net importers of grain during the 1970s and early 1980s approached self-sufficiency

by the mid-1980s.

With similar macro and sectoral policy reforms plus new technologies, most developing countries could greatly expand their agricultural production and thus rural and national incomes. The current depressed food prices caused by industrial-country policies present a dilemma for developing countries: whether to take advantage of cheap food imports and let domestic agriculture stagnate, or to insulate domestic producers with, for example, variable import levies, to encourage agricultural development and self-sufficiency. The latter would tend to exacerbate world surpluses.

Government intervention in minerals and metals has been more limited than in agricultural markets. Now that the tin cartel has collapsed, the main exception is the protection afforded to steel producers in industrial countries which has slowed the decade-long restructuring efforts in that industry and thus contributed to global excess capacity and downward pressure on world prices. Tougher environmental regulations have affected some metals markets in the industrial countries by raising the costs of, or in some cases prohibiting, domestic production, but they also have increased the importance of secondary recovery.

Resource-rich developing countries, many with balance of payments problems, have actively encouraged the development of new mines and processing facilities, directly through public-sector investment and indirectly through tax incentives for the private sector. Contrary to popular perception and criticism, many of these so-called social producers are the world's most efficient. Chile is the lowest-cost copper producer; Brazil is among the lowest in iron ore, steel, and tin. Despite global overcapacity, developing countries will continue to pursue expansionary policies in minerals and metals because of foreign exchange needs and because these projects are economical even at depressed prices.

### *Outlook and implications*

The foregoing analysis of the fundamental demand and supply forces affecting non-oil commodity prices indicates the chances of a resurgence of world inflation emanating from commodity-producing sectors in the intermediate future are slim. Prices of industrial raw materials are unlikely to continue rising at the rapid pace recorded earlier this year, and probably will recede from recent levels in the absence of a further rise in oil prices or further substantial dollar weakness. Food commodity prices will remain depressed. Relative to dollar prices of manufactures, prices of many primary commodities could continue to trend down for several more years, or at best level out.

While the outlook for non-oil commodity prices over the medium term is for a continued weak trend in real terms, there may be considerable short-run volatility in nominal dollar terms in response to oil price movements, dollar exchange rate changes, shifts in general inflation expectations, or temporary supply disruptions. However, the huge stocks of many food commodities will clearly dampen any upside price tendencies in response, for example, to weather-related reductions in production, or to marginal changes in agricultural policies. Industrial raw material prices, especially metals, are likely to be more volatile now that stock levels have been reduced, thereby increasing short-run price sensitivity to shifts in demand or temporary supply difficulties. Even though there is substantial excess productive capacity

*Table 8*

### *Terms of trade*

*1980=100*

| | 1965 | 1973 | 1984 | 1986 |
|---|---|---|---|---|
| *Non-oil commodity-exporting countries* | 131 | 128 | 91 | 89 |
| *Argentina* | 162 | 122 | 94 | 69 |
| *Brazil* | 156 | 147 | 92 | 92 |
| *Chile* | 178 | 234 | 84 | 81 |
| *Malaysia* | 103 | 77 | 86 | 69 |
| *Peru* | 119 | 69 | 93 | 68 |
| *Philippines* | 187 | 165 | 87 | 92 |
| *Thailand* | 135 | 160 | 85 | 88 |
| *Australia* | 144 | 175 | 95 | 80 |
| *New Zealand* | 139 | 158 | 96 | 82 |

*Table 9*

### *Developing countries' share of world primary commodities exports*

*percent*

| | 1969-71 | 1979-81 | 1984-86 |
|---|---|---|---|
| *Total* | 59 | 50 | 51 |
| *Food* | 55 | 45 | 47 |
| *Beverages* | 100 | 100 | 100 |
| *Cereals* | 22 | 18 | 21 |
| *Sugar* | 72 | 67 | 65 |
| *Fats & oils* | 32 | 40 | 45 |
| *Agricultural nonfood* | 81 | 71 | 75 |
| *Cotton* | 68 | 45 | 57 |
| *Timber* | 95 | 93 | 86 |
| *Metals & minerals* | 52 | 48 | 48 |
| *Copper* | 61 | 60 | 64 |
| *Iron ore* | 47 | 49 | 51 |
| *Aluminum* | 33 | 29 | 28 |

Source: World Bank.

for many industrial materials, output tends to be unresponsive to higher prices in the very short run. However, if these higher prices persist for long, excess capacity will be brought on line, with subsequent price dampening effects.

For primary-commodity-exporting countries, the outlook for continued weakness of non-oil commodity prices over the medium term, especially relative to world manufactures prices, implies a further deterioration in their terms of trade. As a group, they experienced a decline in their overall terms of trade of more than 11% between 1980 and 1986. Several industrial countries that are major exporters of commodities, such as Australia and New Zealand, also experienced significant worsening of their terms of trade (see Table 8).

Many commodity-exporting countries have offset some of the adverse impact of terms-of-trade deterioration by expanding export volumes. For certain commodities, they did this partly by regaining during the 1980s some of the share of world export markets lost during the 1970s, although in the aggregate market share gains were negligible (see Table 9). Despite high export volumes their total export earnings from major commodities last year were still nearly 18% below 1980. Developing countries' net trade position in food commodities also has deteriorated substantially, as consumption growth outpaced production. Their net grain imports, for example, rose to an average of more than 85 million tons annually during the latest three-year period, from less than 43 million tons a year in the early 1970s.

Weak commodity prices and related terms-of-trade deterioration have had and will continue to have depressing effects on the overall export and economic growth performance of countries dependent on primary commodity exports. These conditions will make it difficult for those with serious debt problems to grow their way out of them. Many countries with economic structures based largely on primary production have little alternative, at least in the near term, to expanding their commodity output as a means of achieving economic growth. The benefits of increasing food production for the domestic market, at least, accrue to their respective countries in the form of either higher incomes for the producers or lower prices for consumers. Scarce foreign exchange also may be saved. In the case of commodities produced for export, there will be circumstances involving an individual commodity or an individual producer where investing to expand production for export could yield positive results. Investments that improve the efficiency of existing primary commodity production, and thereby free resources for other sectors of the economy, also can be beneficial. However, if all primary commodity exporters expand their output the result would be to exacerbate excess supplies and further depress prices and export revenues.

Thus, it behooves commodity-exporting countries to diversify their economies into the production and export of manufactures. Those developing countries that already have moved in this direction and have significantly reduced their dependence on primary commodity exports generally have fared better during the 1980s. Their terms of trade have improved, export volume gains have been greater, and economic growth has been higher.

Diversification can take the form of advanced processing of the primary commodities as well as development of new areas of manufacturing. However, export-led growth will not come easily to those who

diversify. Although the income and price elasticities of demand for manufactures exports are much higher than for primary commodities, sluggish industrial-country growth and a variety of protectionist trade barriers also confront LDC manufactures exports. Moreover, countries attempting to diversify into manufacturing must compete for market share with established producers in industrial countries and the NICs, as well as with other countries also seeking to diversify their exports.

Even if diversification does not produce strong, export-led growth, the policies required for establishing manufacturing activities that are internationally competitive will be beneficial in terms of improving the general efficiency of resource allocation and thus internally generated growth. Indeed, realistic exchange rates and trade liberalization, two critical policies in any outward-looking development strategy, are likely to benefit commodity-producing sectors as well as manufactures-exporting activities. All too often developing countries have saddled their commodity-exporting sectors with overvalued exchange rates and heavy tax burdens, as well as high cost inputs resulting from import barriers designed to protect domestic industry.

Beyond this, stronger growth and agricultural policy reform in industrial countries hold the key to easing the difficulties faced by developing countries heavily dependent on commodity exports. In virtually every international forum, industrial countries have been called upon to adopt policies to strengthen economic growth while reducing their trade imbalances. Implementation, however, remains inadequate to narrow significantly the huge trade imbalances among industrial countries, while developing-country commodity exports continue to be adversely affected by the demand and price dampening effects of slow overall industrial-country growth.

Likewise, in the area of agricultural production and trade, there is growing recognition that the domestic farm support programs of industrial countries not only impose increasingly heavy costs on their own taxpayers and consumers, but also adversely affect trade and growth in developing countries. The recent U.S. proposal in the current GATT negotiations for a phased elimination of all agricultural subsidies and import barriers over the next ten years has challenged other countries to join in undertaking radical reform in this critical area. The political costs of ending subsidies and liberalizing trade unilaterally are unacceptable, but the United States has offered to put all its domestic farm support programs on the negotiating table, with the aim of achieving an international breakthrough toward liberalizing agricultural trade and allowing market price signals to determine producer decisions. Initial reactions suggest the EC and Japan are not ready for such radical change. Even partial movement along the lines proposed by the United States could bring important benefits to developing countries in the form of reducing the disincentives to domestic production that arise from artificially depressed world prices and providing opportunities for expanded commodity exports. Analyses that simulate a phased liberalization of industrial-country agricultural policies indicate that significant net benefits would eventually accrue to developing countries. According to one very recent unpublished study that assumed complete liberalization along the lines of the recent U.S. proposal, once industrial-country surplus stocks are worked down, world market prices for food commodities in real terms would recover, although not all the way back to their early 1980s level. In combination with much larger export volumes and increased production for domestic consumption, developing countries could eventually improve their annual food trade balance by as much as $40 billion, turning from net importers to net exporters. Moreover, the U.S. agricultural trade surpluses would rise substantially at the expense of Europe, which would revert to being a sizable net food importer, thereby helping narrow trade imbalances among major industrial countries.

## *Statistical appendix*

*For key to data in tables see April 1987 issue.*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Information herein is from sources considered to be reliable but is furnished without responsibility on the part of Morgan Guaranty Trust Company.

# Effective exchange rates — industrial countries

*Index numbers, 1980-82 average=100.*

| | United States | Canada | Japan | Australia | France | Germany | Italy | United Kingdom | Austria | Belgium | Neth-erlands | Spain | Swit-zerland | Den-mark | Norway | Swe-den |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Nominal against 15 other industrial-country currencies** | | | | | | | | | | | | | | | | |
| *1981* | 99.5 | 100.2 | 105.8 | 104.0 | 100.4 | 97.2 | 98.8 | 102.1 | 98.9 | 101.8 | 97.1 | 99.4 | 98.3 | 99.2 | 100.1 | 103.3 |
| *1982* | 109.8 | 99.4 | 98.6 | 100.1 | 93.1 | 102.8 | 92.8 | 98.1 | 101.7 | 92.3 | 102.7 | 94.1 | 106.3 | 95.7 | 101.7 | 92.8 |
| *1983* | 114.2 | 100.8 | 107.8 | 92.0 | 87.3 | 107.6 | 90.3 | 91.6 | 103.6 | 90.0 | 105.0 | 78.4 | 111.5 | 96.4 | 99.4 | 82.2 |
| *1984* | 122.4 | 97.3 | 113.0 | 94.2 | 84.4 | 107.4 | 86.7 | 88.1 | 103.6 | 88.9 | 104.0 | 77.4 | 110.5 | 93.9 | 97.8 | 84.3 |
| *1985* | 127.1 | 92.8 | 115.8 | 76.3 | 85.4 | 107.8 | 82.1 | 88.2 | 104.2 | 89.5 | 104.0 | 75.6 | 109.5 | 95.0 | 95.6 | 83.9 |
| *1986* | 106.0 | 87.6 | 150.1 | 61.4 | 87.4 | 116.1 | 82.9 | 80.7 | 107.8 | 92.9 | 110.3 | 73.4 | 118.1 | 89.7 | 89.3 | 81.6 |
| *1987* | | | | | | | | | | | | | | | | |
| *January* | 98.5 | 88.1 | 156.1 | 57.2 | 87.4 | 122.2 | 84.0 | 74.8 | 110.4 | 95.9 | 114.9 | 71.9 | 121.7 | 103.9 | 83.8 | 79.9 |
| *February* | 96.9 | 89.7 | 156.4 | 57.2 | 87.9 | 122.7 | 83.9 | 74.8 | 110.7 | 96.4 | 115.0 | 71.3 | 121.4 | 104.6 | 84.4 | 80.0 |
| *March* | 96.0 | 90.5 | 157.9 | 58.3 | 87.3 | 121.7 | 83.3 | 76.1 | 110.3 | 95.7 | 114.1 | 71.1 | 121.4 | 103.7 | 84.8 | 80.6 |
| *April* | 94.0 | 90.2 | 165.9 | 59.1 | 87.2 | 121.4 | 82.9 | 78.8 | 110.0 | 95.5 | 114.1 | 71.1 | 123.0 | 103.2 | 85.3 | 80.6 |
| *May* | 93.5 | 88.4 | 168.2 | 58.7 | 87.1 | 121.7 | 82.1 | 79.8 | 110.1 | 95.6 | 114.3 | 71.4 | 123.8 | 103.6 | 85.8 | 80.4 |
| *June* | 94.8 | 88.8 | 164.7 | 59.9 | 87.1 | 121.6 | 81.8 | 79.1 | 110.2 | 95.6 | 114.3 | 71.9 | 122.7 | 103.4 | 86.5 | 80.5 |
| *July* | 96.0 | 90.0 | 159.1 | 60.0 | 87.2 | 121.4 | 81.6 | 79.2 | 110.2 | 95.4 | 114.2 | 72.5 | 122.2 | 102.4 | 87.2 | 80.4 |
| *July* 24 | 96.5 | 90.1 | 157.9 | 60.3 | 87.1 | 121.2 | 81.5 | 79.2 | 110.1 | 95.3 | 114.1 | 72.7 | 122.3 | 102.3 | 87.3 | 80.4 |
| 31 | 96.4 | 89.6 | 159.6 | 59.4 | 87.2 | 121.3 | 81.5 | 78.9 | 110.1 | 95.4 | 114.1 | 72.9 | 122.5 | 102.3 | 87.0 | 80.4 |
| *August* 7 | 96.8 | 90.6 | 158.2 | 59.9 | 86.9 | 121.1 | 81.3 | 78.5 | 110.1 | 95.2 | 114.1 | 73.2 | 122.2 | 102.1 | 87.3 | 80.2 |
| 14 | 97.2 | 90.0 | 159.5 | 60.2 | 86.7 | 121.1 | 81.3 | 78.9 | 110.1 | 95.0 | 114.0 | 73.1 | 121.9 | 100.9 | 87.4 | 80.4 |
| 21 | 95.2 | 89.6 | 164.3 | 59.8 | 86.8 | 121.4 | 81.6 | 79.2 | 110.1 | 95.2 | 114.2 | 73.6 | 122.5 | 100.9 | 87.3 | 80.2 |
| 28 | 94.1 | 90.0 | 166.8 | 59.3 | 86.9 | 121.6 | 81.6 | 78.8 | 110.1 | 95.3 | 114.3 | 74.2 | 123.5 | 101.2 | 87.1 | 80.1 |
| **Real against 15 other industrial-country currencies** | | | | | | | | | | | | | | | | |
| *1981* | 100.8 | 99.5 | 104.8 | 102.6 | 100.0 | 96.9 | 98.9 | 102.5 | 99.4 | 101.4 | 97.1 | 99.6 | 98.7 | 98.9 | 101.3 | 101.9 |
| *1982* | 109.3 | 100.6 | 92.4 | 105.7 | 97.3 | 99.9 | 98.5 | 98.8 | 101.2 | 91.9 | 100.5 | 99.0 | 103.0 | 97.9 | 103.2 | 95.6 |
| *1983* | 112.7 | 102.6 | 96.8 | 101.9 | 94.7 | 101.0 | 101.1 | 93.1 | 102.0 | 88.6 | 100.8 | 88.9 | 105.1 | 100.4 | 102.0 | 90.7 |
| *1984* | 119.6 | 100.2 | 97.8 | 106.4 | 97.0 | 98.0 | 101.8 | 90.2 | 103.0 | 85.9 | 97.8 | 91.1 | 100.1 | 99.2 | 100.5 | 86.0 |
| *1985* | 122.5 | 96.5 | 96.6 | 89.5 | 100.5 | 96.7 | 100.2 | 92.8 | 103.3 | 85.3 | 96.8 | 92.5 | 98.0 | 101.2 | 99.5 | 86.9 |
| *1986* | 101.5 | 93.4 | 119.2 | 78.9 | 103.9 | 103.4 | 102.6 | 87.4 | 106.8 | 84.6 | 101.4 | 94.0 | 105.6 | 107.5 | 97.1 | 86.0 |
| *1987* | | | | | | | | | | | | | | | | |
| *February* | 93.2 | 96.0 | 120.6 | 77.9 | 104.0 | 107.9 | 104.7 | 82.6 | 109.4 | 86.2 | 105.3 | 94.0 | 109.0 | 112.1 | 98.6 | 95.6 |
| *March* | 92.5 | 96.5 | 121.0 | 79.9 | 105.7 | 106.3 | 103.7 | 86.1 | 109.0 | 85.2 | 105.0 | 93.4 | 108.8 | 112.3 | 98.6 | 95.8 |
| *April* | 90.5 | 96.6 | 126.3 | 81.4 | 105.7 | 105.9 | 103.3 | 87.0 | 108.7 | 84.6 | 105.3 | 93.8 | 110.2 | 111.9 | 99.9 | 95.5 |
| *May* | 90.0 | 95.3 | 127.6 | 81.3 | 105.9 | 106.6 | 101.5 | 88.4 | 108.7 | 83.3 | 105.7 | 94.7 | 111.0 | 112.4 | 101.1 | 95.4 |
| *June* | 91.3 | 95.7 | 124.9 | 83.1 | 105.8 | 106.4 | 101.7 | 87.4 | 108.6 | 83.3 | 104.8 | 95.1 | 110.6 | 112.3 | 103.8 | 95.5 |
| *July* | 92.5 | 97.0 | 119.5 | 84.5 | 106.9 | 106.5 | 101.3 | 87.6 | 108.7 | 82.8 | 102.5 | 96.3 | 110.7 | 110.7 | 105.7 | 95.5 |
| **Real against 18 other industrial-country and 22 LDC currencies** | | | | | | | | | | | | | | | | |
| *1981* | 99.8 | 99.4 | 104.7 | 102.5 | 99.5 | 96.2 | 98.2 | 102.0 | 98.9 | 100.9 | 96.6 | 98.9 | 98.0 | 98.7 | 101.3 | 101.6 |
| *1982* | 109.6 | 101.8 | 94.0 | 105.2 | 96.9 | 99.3 | 98.1 | 98.5 | 101.1 | 91.6 | 99.5 | 98.9 | 102.6 | 97.7 | 103.0 | 95.4 |
| *1983* | 114.9 | 104.6 | 100.4 | 102.1 | 94.4 | 100.6 | 100.8 | 93.0 | 102.1 | 88.2 | 99.5 | 89.2 | 105.1 | 100.3 | 101.9 | 90.9 |
| *1984* | 120.8 | 102.7 | 102.4 | 106.7 | 96.4 | 96.8 | 101.0 | 89.7 | 102.7 | 85.0 | 95.9 | 91.3 | 99.8 | 99.0 | 100.5 | 95.7 |
| *1985* | 124.0 | 99.2 | 101.6 | 90.1 | 100.0 | 95.8 | 99.8 | 92.3 | 102.9 | 84.5 | 94.8 | 93.2 | 97.8 | 101.2 | 99.8 | 96.8 |
| *1986* | 107.1 | 94.5 | 124.0 | 80.8 | 104.5 | 104.5 | 104.1 | 88.2 | 107.4 | 85.1 | 101.4 | 96.5 | 107.5 | 108.0 | 97.9 | 96.8 |
| *1987* | | | | | | | | | | | | | | | | |
| *February* | 100.3 | 96.7 | 125.2 | 79.9 | 105.4 | 110.6 | 107.5 | 84.3 | 111.2 | 87.6 | 106.6 | 97.8 | 112.4 | 113.2 | 99.7 | 97.0 |
| *March* | 99.5 | 97.1 | 125.6 | 81.9 | 107.1 | 108.9 | 106.4 | 87.8 | 110.6 | 86.5 | 106.1 | 97.1 | 111.9 | 113.3 | 99.7 | 97.1 |
| *April* | 97.4 | 97.0 | 130.7 | 83.3 | 107.0 | 108.4 | 105.9 | 88.7 | 110.2 | 85.9 | 106.3 | 97.5 | 113.2 | 112.8 | 100.9 | 96.8 |
| *May* | 96.6 | 95.4 | 131.8 | 83.3 | 107.1 | 109.0 | 104.0 | 90.2 | 110.3 | 84.6 | 106.7 | 98.3 | 114.0 | 113.5 | 102.3 | 96.9 |
| *June* | 98.0 | 96.1 | 129.4 | 84.7 | 107.0 | 108.7 | 104.3 | 89.1 | 110.1 | 84.6 | 105.8 | 98.9 | 113.6 | 113.3 | 104.9 | 96.9 |
| *July* | 99.1 | 97.5 | 123.9 | 85.7 | 108.2 | 108.8 | 104.0 | 89.3 | 110.3 | 83.9 | 103.4 | 100.1 | 113.6 | 111.8 | 106.7 | 97.0 |

# Real effective exchange rates – developing countries

*Index numbers, 1980-82 average=100.*

| | Argentina | Brazil | Chile | Colombia | Mexico | Peru | Venezuela | Hong Kong | Indonesia | Korea | Malaysia | Philippines | Singapore | Taiwan | Israel | Turkey |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *1981* | 107.8 | 103.3 | 108.3 | 100.6 | 114.4 | 103.3 | 99.7 | 98.9 | 99.8 | 100.3 | 99.4 | 101.2 | 102.0 | 101.8 | 99.3 | 104.7 |
| *1982* | 77.0 | 112.9 | 97.3 | 105.9 | 82.9 | 104.6 | 110.2 | 101.6 | 111.7 | 101.9 | 105.6 | 106.7 | 100.8 | 96.6 | 108.6 | 96.0 |
| *1983* | 71.5 | 86.2 | 89.2 | 104.9 | 78.8 | 98.4 | 117.2 | 95.8 | 96.3 | 97.6 | 113.9 | 96.1 | 101.8 | 94.5 | 120.8 | 93.5 |
| *1984* | 80.1 | 85.7 | 90.1 | 99.6 | 91.8 | 105.8 | 86.0 | 100.2 | 98.0 | 96.5 | 119.7 | 107.9 | 102.4 | 97.1 | 119.5 | 91.1 |
| *1985* | 71.2 | 85.1 | 79.7 | 85.7 | 90.5 | 96.3 | 93.0 | 104.2 | 94.8 | 89.2 | 116.4 | 114.6 | 95.7 | 94.6 | 106.8 | 91.5 |
| *1986* | 61.0 | 74.5 | 68.7 | 67.7 | 65.1 | 93.8 | 86.0 | 94.9 | 71.7 | 75.8 | 94.6 | 90.2 | 80.3 | 88.7 | 100.9 | 71.1 |
| *1987* | | | | | | | | | | | | | | | | |
| *January* | 56.3 | 76.0 | 65.6 | 65.7 | 60.8 | 107.8 | 47.1 | 91.1 | 56.1 | 74.1 | 90.3 | 87.6 | 76.5 | 88.4 | 94.8 | 63.8 |
| *February* | 55.6 | 71.8 | 66.2 | 66.2 | 61.2 | 111.2 | 47.7 | 90.6 | 56.0 | 73.8 | 90.7 | 85.0 | 74.8 | 88.8 | 93.5 | 63.4 |
| *March* | 53.4 | 71.3 | 66.7 | 65.7 | 62.1 | 113.1 | 47.5 | 91.6 | 55.1 | 73.8 | 90.3 | 84.5 | 74.2 | 89.2 | 94.6 | 64.1 |
| *April* | 53.1 | 75.5 | 65.9 | 64.8 | 62.2 | 115.7 | 47.2 | 90.7 | 53.6 | 73.5 | 90.7 | 83.8 | 73.1 | 89.7 | 95.1 | 63.5 |
| *May* | 53.2 | 75.9 | 66.1 | 63.4 | 63.1 | 118.6 | 47.5 | 90.9 | 53.9 | 74.1 | 89.4 | 81.2 | 73.4 | 92.5 | 95.2 | 63.1 |
| *June* | 54.4 | 67.4 | 66.8 | 64.0 | 62.7 | 123.2 | 48.5 | 92.5 | 54.8 | 75.8 | 90.1 | 81.3 | 74.0 | 95.6 | 96.4 | 63.2 |
| *July* | 51.3 | 65.5 | 68.2 | 63.9 | 65.2 | 122.5 | 49.3 | 92.0 | 56.2 | 77.7 | 91.8 | 84.4 | 76.0 | 98.6 | 97.1 | 62.1 |

# International banking market size

*at end of period, billions of dollars*

| | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | Dec | Mar | Jun | Sep | Dec |
| **Gross claims** | | | | | | | | | |
| **Eurocurrencies, on residents and nonresidents** | **1 929** | **2 146** | **2 253** | **2 359** | **2 833** | **2 947** | **3 040** | **3 347** | **3 560** |
| *On nonbanks* | 557 | 634 | 665 | 694 | 822 | 854 | 875 | 914 | 938 |
| *On banks* | 1 372 | 1 512 | 1 588 | 1 665 | 2 011 | 2 093 | 2 165 | 2 433 | 2 622 |
| *In dollars* | 1 504 | 1 694 | 1 797 | 1 894 | 2 101 | 2 138 | 2 166 | 2 381 | 2 534 |
| *In other currencies* | 425 | 452 | 456 | 465 | 732 | 809 | 874 | 966 | 1 025 |
| **Domestic currencies, on nonresidents** | **365** | **398** | **402** | **402** | **506** | **535** | **578** | **633** | **672** |
| *On nonbanks* | 128 | 132 | 140 | 142 | 187 | 186 | 201 | 211 | 209 |
| *On banks* | 237 | 266 | 262 | 260 | 319 | 349 | 377 | 422 | 463 |
| *In dollars* | 188 | 211 | 221 | 215 | 215 | 203 | 210 | 219 | 227 |
| *In other currencies* | 177 | 187 | 181 | 187 | 291 | 332 | 368 | 414 | 445 |
| **Total** | **2 294** | **2 544** | **2 655** | **2 761** | **3 339** | **3 482** | **3 618** | **3 980** | **4 232** |
| *On nonbanks* | 685 | 766 | 805 | 836 | 1 009 | 1 040 | 1 076 | 1 125 | 1 147 |
| *On banks* | 1 609 | 1 778 | 1 850 | 1 925 | 2 330 | 2 442 | 2 542 | 2 855 | 3 085 |
| *In dollars* | 1 692 | 1 905 | 2 018 | 2 109 | 2 316 | 2 341 | 2 376 | 2 600 | 2 761 |
| *In other currencies* | 602 | 639 | 637 | 652 | 1 023 | 1 141 | 1 242 | 1 380 | 1 470 |
| **Gross liabilities** | | | | | | | | | |
| **Eurocurrencies, to residents and nonresidents** | **1 954** | **2 168** | **2 278** | **2 386** | **2 846** | **2 964** | **3 059** | **3 384** | **3 579** |
| *To nonbanks* | 372 | 432 | 479 | 497 | 585 | 610 | 632 | 660 | 665 |
| *To official monetary institutions* | 112 | 91 | 88 | 96 | 112 | 106 | 109 | 110 | 109 |
| *To other banks* | 1 470 | 1 645 | 1 711 | 1 793 | 2 149 | 2 248 | 2 318 | 2 614 | 2 786 |
| *In dollars* | 1 539 | 1 741 | 1 846 | 1 950 | 2 147 | 2 166 | 2 204 | 2 425 | 2 553 |
| *In other currencies* | 415 | 427 | 432 | 436 | 699 | 798 | 855 | 959 | 1 026 |
| **Domestic currencies, to nonresidents** | **263** | **250** | **260** | **280** | **377** | **394** | **418** | **464** | **494** |
| *To nonbanks* | 74 | 70 | 73 | 80 | 114 | 121 | 121 | 121 | 116 |
| *To banks* | 189 | 180 | 187 | 200 | 263 | 273 | 297 | 343 | 377 |
| *In dollars* | 126 | 118 | 135 | 146 | 169 | 166 | 171 | 191 | 192 |
| *In other currencies* | 137 | 134 | 125 | 134 | 208 | 228 | 247 | 273 | 302 |
| **Total** | **2 217** | **2 418** | **2 538** | **2 666** | **3 223** | **3 358** | **3 477** | **3 848** | **4 073** |
| *To nonbanks* | 446 | 502 | 552 | 577 | 699 | 731 | 753 | 781 | 801 |
| *To banks and official institutions* | 1 771 | 1 916 | 1 986 | 2 089 | 2 524 | 2 627 | 2 724 | 3 067 | 3 272 |
| *In dollars* | 1 665 | 1 857 | 1 981 | 2 096 | 2 316 | 2 332 | 2 375 | 2 616 | 2 745 |
| *In other currencies* | 552 | 561 | 557 | 570 | 907 | 1 026 | 1 102 | 1 232 | 1 328 |
| ***Net market size*** | **1 155** | **1 285** | **1 382** | **1 430** | **1 676** | **1 735** | **1 800** | **1 910** | **1 980** |

# International bond issues and bank credits

*millions of dollars*

| | 1984 | 1985 | 1986 | 1987 | | | Jan-Jun | |
|---|---|---|---|---|---|---|---|---|
| | | | | Apr | May | Jun | 1987 | 1986 |
| ***By country of borrower*** | | | | | | | | |
| **Industrial countries** | **177 077** | **226 711** | **270 231** | **22 634** | **14 887** | **16 307** | **119 680** | **129 266** |
| *Australia* | 5 816 | 14 407 | 20 106 | 922 | 883 | 1 057 | 5 935 | 9 045 |
| *Austria* | 2 254 | 2 435 | 3 581 | 156 | 233 | 305 | 2 279 | 2 129 |
| *Belgium* | 1 847 | 3 269 | 4 952 | 468 | 543 | 401 | 2 455 | 2 741 |
| *Canada* | 13 124 | 17 184 | 21 633 | 891 | 680 | 1 386 | 5 759 | 9 062 |
| *Denmark* | 4 825 | 3 589 | 9 633 | 224 | 400 | 246 | 3 748 | 2 219 |
| *Finland* | 1 713 | 1 846 | 3 445 | 417 | 359 | 151 | 2 118 | 1 358 |
| *France* | 11 298 | 18 773 | 19 701 | 1 071 | 696 | 804 | 8 047 | 7 581 |
| *Germany* | 2 165 | 3 452 | 11 927 | 433 | 683 | 737 | 6 654 | 5 667 |
| *Greece* | 1 551 | 1 587 | 1 317 | — | 400 | 166 | 676 | 664 |
| *Ireland* | 1 377 | 1 881 | 4 179 | 682 | 144 | 100 | 1 039 | 1 563 |
| *Italy* | 6 933 | 11 033 | 12 962 | 332 | 982 | 610 | 3 884 | 7 873 |
| *Japan* | 17 526 | 21 269 | 35 508 | 5 862 | 1 904 | 3 990 | 21 696 | 15 793 |
| *Netherlands* | 1 973 | 2 299 | 3 579 | 304 | 371 | 409 | 2 566 | 1 693 |
| *New Zealand* | 3 208 | 2 707 | 8 078 | 354 | 140 | 139 | 2 707 | 3 274 |
| *Norway* | 1 324 | 3 905 | 6 644 | 146 | 300 | 204 | 3 559 | 2 184 |
| *Portugal* | 1 796 | 2 382 | 2 433 | — | 582 | 336 | 1 302 | 1 612 |
| *South Africa* | 1 422 | 825 | — | — | — | — | — | — |
| *Spain* | 4 931 | 3 913 | 7 015 | 130 | 205 | 139 | 896 | 2 884 |
| *Sweden* | 11 256 | 9 890 | 8 020 | 274 | 356 | 690 | 3 579 | 5 949 |
| *United Kingdom* | 8 899 | 25 424 | 24 295 | 6 132 | 2 034 | 1 181 | 16 798 | 10 847 |
| *United States* | 65 054 | 69 193 | 56 774 | 3 608 | 2 665 | 2 930 | 21 399 | 32 319 |
| *Other** | 6 785 | 5 447 | 4 448 | 227 | 327 | 324 | 2 582 | 2 806 |
| **Developing countries** | **39 725** | **32 139** | **24 317** | **8 957** | **1 869** | **919** | **16 137** | **13 959** |
| **Latin American countries** | **17 464** | **8 115** | **3 192** | **7 750** | **170** | **113** | **8 638** | **1 497** |
| *Argentina* | 4 212 | 3 700 | 17 | — | — | — | — | 17 |
| *Brazil* | 6 649 | — | 219 | — | — | — | — | — |
| *Chile* | 784 | 1 085 | — | — | — | — | — | — |
| *Colombia* | 589 | 1 052 | 89 | 50 | — | — | 50 | — |
| *Mexico* | 3 918 | 109 | 313 | 7 700 | — | — | 7 700 | 50 |
| *Venezuela* | — | 48 | — | — | — | — | — | — |
| *Other*** | 1 312 | 2 121 | 2 554 | — | 170 | 113 | 888 | 1 430 |
| **Asian countries** | **15 893** | **18 410** | **15 291** | **856** | **1 509** | **532** | **5 798** | **8 830** |
| *India* | 945 | 818 | 1 721 | 56 | 155 | 55 | 805 | 725 |
| *Indonesia* | 1 924 | 451 | 1 358 | 346 | 24 | — | 620 | 983 |
| *Korea* | 6 201 | 5 898 | 3 134 | — | 547 | 52 | 1 374 | 2 229 |
| *Malaysia* | 2 605 | 2 219 | 1 328 | 83 | — | 83 | 250 | 452 |
| *Philippines* | 925 | 925 | — | — | — | — | — | — |
| *Thailand* | 1 221 | 1 497 | 1 401 | 69 | — | 40 | 209 | 1 044 |
| *Other* | 2 072 | 6 602 | 6 350 | 303 | 783 | 302 | 2 540 | 3 397 |
| **Middle Eastern and African countries** | **6 368** | **5 613** | **5 834** | **351** | **189** | **274** | **1 701** | **3 632** |
| *Algeria* | 821 | 1 450 | 1 344 | 76 | 3 | — | 154 | 797 |
| *Nigeria* | 985 | — | — | — | — | — | — | — |
| *Turkey* | 741 | 1 203 | 2 637 | 200 | 141 | 260 | 1 113 | 1 322 |
| *Other* | 3 821 | 2 960 | 1 853 | 75 | 45 | 14 | 434 | 1 513 |
| **Eastern European countries** | **3 244** | **5 236** | **4 091** | **338** | **169** | **100** | **1 756** | **2 219** |
| *Hungary* | 1 386 | 1 577 | 1 315 | 138 | — | — | 714 | 821 |
| *Soviet Union* | 1 051 | 1 489 | 1 821 | 200 | 169 | — | 662 | 1 248 |
| *Other**** | 807 | 2 169 | 955 | — | — | 100 | 380 | 150 |
| **International organizations****** | **13 287** | **20 635** | **18 916** | **1 430** | **611** | **1 372** | **9 367** | **9 134** |
| ***By type of instrument and currency*** | | | | | | | | |
| **International bond issues** | **107 411** | **167 756** | **226 393** | **16 427** | **12 515** | **14 137** | **101 573** | **110 372** |
| *Eurobonds* | 79 458 | 136 731 | 187 952 | 14 397 | 10 399 | 12 176 | 86 276 | 91 771 |
| *U.S. dollar* | 63 593 | 97 782 | 118 220 | 6 201 | 2 899 | 5 104 | 31 805 | 55 530 |
| *German mark* | 4 604 | 9 491 | 16 870 | 329 | 976 | 834 | 9 643 | 9 294 |
| *British pound* | 3 997 | 5 766 | 10 510 | 1 110 | 1 678 | 1 272 | 9 430 | 6 670 |
| *Japanese yen* | 1 212 | 6 539 | 18 673 | 4 205 | 2 189 | 2 583 | 17 145 | 7 819 |
| *European composite units* | 3 032 | 7 038 | 6 965 | 432 | 760 | 693 | 5 262 | 4 370 |
| *Other* | 3 020 | 10 114 | 16 713 | 2 121 | 1 897 | 1 689 | 12 991 | 8 088 |
| *Foreign bonds* | 27 953 | 31 025 | 38 441 | 2 030 | 2 116 | 1 962 | 15 297 | 18 601 |
| *U.S. dollar* | 5 487 | 4 655 | 6 064 | 200 | — | — | 1 750 | 2 664 |
| *German mark* | 2 243 | 1 741 | — | — | — | — | — | — |
| *British pound* | 1 292 | 958 | 322 | — | — | — | — | 321 |
| *Swiss franc* | 12 626 | 14 954 | 23 401 | 1 413 | 1 385 | 1 512 | 10 301 | 11 115 |
| *Japanese yen* | 4 628 | 6 379 | 4 756 | 104 | 432 | 209 | 1 726 | 3 091 |
| *Other* | 1 677 | 2 339 | 3 898 | 313 | 300 | 241 | 1 519 | 1 409 |
| **International bank credits** | **125 922** | **116 964** | **91 164** | **16 932** | **5 019** | **4 561** | **45 368** | **44 207** |
| *Eurocurrency credits* | 112 605 | 110 317 | 82 755 | 16 293 | 4 471 | 3 967 | 41 612 | 40 765 |
| *Foreign credits* | 13 317 | 6 647 | 8 409 | 639 | 548 | 594 | 3 756 | 3 441 |
| **Total** | **233 333** | **284 720** | **317 556** | **33 359** | **17 534** | **18 698** | **146 941** | **154 579** |

*Includes multinational organizations. **Includes unallocated. ***Includes COMECON institutions. ****Includes regional development organizations.

# Eurocurrency deposit rates

*prime banks' bid rates, at or near end of month*

| | 1983 | 1984 | 1985 | 1987 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Dec | Dec | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul |
| **Eurodollar** | | | | | | | | | | |
| *overnight* | 9.50 | 8.63 | 12.25 | 6.00 | 5.87 | 6.25 | 6.50 | 6.69 | 6.44 | n.a. |
| *one month* | 9.69 | 8.38 | 8.00 | 6.06 | 6.31 | 6.44 | 6.69 | 7.12 | 6.94 | 6.75 |
| *three months* | 9.81 | 8.63 | 7.88 | 6.12 | 6.31 | 6.50 | 7.00 | 7.25 | 7.06 | 7.00 |
| *six months* | 10.06 | 9.13 | 7.88 | 6.12 | 6.31 | 6.56 | 7.25 | 7.44 | 7.25 | 7.25 |
| *twelve months* | 10.38 | 9.81 | 7.94 | 6.12 | 6.37 | 6.69 | 7.62 | 7.94 | 7.62 | 7.69 |
| **Euro-Canadian dollar** | | | | | | | | | | |
| *one month* | 9.13 | 9.88 | 9.00 | 7.37 | 7.12 | 6.87 | 7.37 | 7.87 | 8.06 | 8.94 |
| *three months* | 9.50 | 10.81 | 9.00 | 7.37 | 7.25 | 6.87 | 8.25 | 8.12 | 8.19 | 9.12 |
| *six months* | 9.75 | 10.06 | 9.00 | 7.37 | 7.44 | 6.94 | 8.62 | 8.44 | 8.37 | 9.56 |
| *twelve months* | 10.00 | 10.44 | 9.00 | 7.50 | 7.62 | 7.06 | 8.87 | 8.87 | 8.69 | 9.87 |
| **Euro-French franc** | | | | | | | | | | |
| *one month* | 12.13 | 10.69 | 12.50 | 8.81 | 8.31 | 8.19 | 8.12 | 8.00 | 8.06 | 7.81 |
| *three months* | 12.19 | 10.69 | 13.00 | 8.87 | 8.44 | 8.25 | 8.25 | 8.19 | 8.37 | 8.12 |
| *six months* | 12.31 | 11.00 | 13.13 | 8.81 | 8.44 | 8.31 | 8.31 | 8.37 | 8.56 | 8.56 |
| *twelve months* | 12.63 | 11.38 | 12.25 | 8.81 | 8.44 | 8.31 | 8.50 | 8.62 | 9.00 | 9.12 |
| **Euromark** | | | | | | | | | | |
| *one month* | 5.25 | 5.50 | 4.75 | 4.00 | 3.94 | 3.87 | 3.81 | 3.75 | 3.62 | 3.87 |
| *three months* | 5.88 | 5.50 | 4.75 | 4.12 | 4.00 | 3.87 | 3.81 | 3.75 | 3.81 | 3.94 |
| *six months* | 6.13 | 5.56 | 4.75 | 4.12 | 4.00 | 3.87 | 3.87 | 3.75 | 3.81 | 4.12 |
| *twelve months* | 6.38 | 5.56 | 4.81 | 4.19 | 4.12 | 4.00 | 4.00 | 3.87 | 3.87 | 4.00 |
| **Euro-Dutch guilder** | | | | | | | | | | |
| *one month* | 5.81 | 5.69 | 5.75 | 5.44 | 5.31 | 5.31 | 5.19 | 5.06 | 5.19 | 5.25 |
| *three months* | 6.00 | 5.75 | 5.75 | 5.31 | 5.31 | 5.31 | 5.19 | 5.06 | 5.19 | 5.31 |
| *six months* | 6.25 | 5.81 | 5.81 | 5.19 | 5.25 | 5.31 | 5.19 | 5.12 | 5.19 | 5.37 |
| *twelve months* | 6.38 | 5.94 | 5.88 | 5.19 | 5.25 | 5.31 | 5.19 | 5.12 | 5.19 | 5.44 |
| **Euro-Swiss franc** | | | | | | | | | | |
| *one month* | 3.38 | 4.44 | 3.88 | 3.25 | 4.19 | 3.25 | 3.25 | 4.25 | 3.69 | 3.62 |
| *three months* | 3.75 | 4.56 | 4.00 | 3.19 | 3.94 | 3.69 | 3.69 | 3.87 | 3.81 | 3.81 |
| *six months* | 3.94 | 4.63 | 4.00 | 3.31 | 3.87 | 3.69 | 3.69 | 3.87 | 3.81 | 3.94 |
| *twelve months* | 3.94 | 4.69 | 4.06 | 3.62 | 3.94 | 3.75 | 3.81 | 3.87 | 3.87 | 4.00 |
| **Eurosterling** | | | | | | | | | | |
| *one month* | 9.13 | 9.50 | 11.69 | 11.06 | 11.12 | 10.00 | 9.44 | 8.87 | 9.12 | 9.00 |
| *three months* | 9.31 | 9.88 | 11.81 | 11.00 | 10.69 | 9.81 | 9.25 | 8.81 | 9.19 | 9.44 |
| *six months* | 9.50 | 10.00 | 11.81 | 10.87 | 10.37 | 9.69 | 9.12 | 8.81 | 9.19 | 9.69 |
| *twelve months* | 9.81 | 10.19 | 11.69 | 10.75 | 10.31 | 9.62 | 9.12 | 9.06 | 9.31 | 10.06 |
| **Euroyen** | | | | | | | | | | |
| *one month* | 6.25 | 6.19 | 7.13 | 4.37 | 4.56 | 3.94 | 3.94 | 4.00 | 3.81 | 3.62 |
| *three months* | 6.31 | 6.19 | 6.56 | 4.25 | 4.25 | 4.00 | 3.94 | 3.87 | 4.00 | 4.06 |
| *six months* | 6.38 | 6.13 | 6.50 | 4.12 | 4.12 | 4.00 | 3.87 | 3.87 | 4.00 | 4.12 |
| *twelve months* | 6.44 | 6.13 | 6.38 | 4.06 | 4.06 | 4.00 | 3.94 | 3.94 | 4.06 | 4.25 |
| **European currency unit** | | | | | | | | | | |
| *one month* | 8.81 | 9.25 | 9.63 | 7.62 | 7.44 | 7.16 | 6.94 | 6.69 | 6.56 | 6.62 |
| *three months* | 9.19 | 9.38 | 9.63 | 7.56 | 7.44 | 7.16 | 6.94 | 6.87 | 6.75 | 6.19 |
| *six months* | 9.44 | 9.50 | 9.63 | 7.50 | 7.44 | 7.16 | 7.00 | 7.00 | 6.94 | 6.94 |
| *twelve months* | 9.63 | 9.63 | 9.63 | 7.50 | 7.37 | 7.19 | 7.19 | 7.12 | 7.12 | 7.12 |

# International bond yields

*average yield of several actively traded, high quality issues with a maturity of 7 to 12 years*
*at or near end of month*

| | 1984 | 1985 | 1986 | 1987 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Dec | Dec | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul |
| **United States companies** | | | | | | | | | | |
| *Eurodollar* | 11.25 | 9.68 | 8.67 | 8.70 | 8.71 | 8.78 | 9.53 | 9.78 | 10.11 | 9.82 |
| *Euromark* | 6.95 | 6.73 | 6.62 | 6.64 | 6.60 | 6.56 | 6.59 | 6.57 | 6.65 | 7.04 |
| *Swiss franc* | 5.73 | 5.49 | 5.70 | 5.67 | 5.64 | 5.68 | 5.55 | 5.52 | 5.50 | 5.57 |
| **European governments** | | | | | | | | | | |
| *Eurodollar* | 12.04 | 10.52 | 9.91 | 9.85 | 10.03 | 10.08 | 11.00 | 11.24 | 11.14 | 11.22 |
| *Euromark* | 7.39 | 7.03 | 6.77 | 6.64 | 6.70 | 6.50 | 6.33 | 6.35 | 6.36 | 6.55 |
| *Swiss franc* | 5.24 | 4.91 | 4.51 | 4.40 | 4.35 | 4.37 | 4.27 | 4.34 | 4.33 | 4.33 |
| *European currency unit* | 10.64 | 10.23 | 10.20 | 10.38 | 10.37 | 10.26 | 13.07 | 10.32 | 10.51 | 10.40 |

# Central bank discount rates

*at or near end of month*

| | 1984 | 1985 | 1986 | 1987 | | | | | Current | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Dec | Dec | Dec | Mar | Apr | May | Jun | Jul | Aug 31 1987 | effective since |
| United States | 8.00 | 7.50 | 5.50 | 5.50 | 5.50 | 5.50 | 5.50 | 5.50 | 5.50 | Aug 21, 86 |
| Canada | 10.09 | 9.49 | 8.47 | 7.05 | 8.33 | 8.44 | 8.54 | 9.22 | 9.24 | Aug 27, 87 |
| Austria | 4.50 | 4.00 | 4.00 | 3.50 | 3.50 | 3.50 | 3.50 | 3.50 | 3.50 | Jan 23, 87 |
| Belgium | 11.00 | 9.75 | 8.00 | 8.00 | 8.00 | 7.75 | 7.50 | 7.25 | 7.25 | Jul 23, 87 |
| Denmark | 7.00 | 7.00 | 7.00 | 7.00 | 7.00 | 7.00 | 7.00 | 7.00 | 7.00 | Oct 27, 83 |
| Finland | 9.50 | 9.00 | 7.00 | 7.00 | 7.00 | 7.00 | 7.00 | 7.00 | 7.00 | May 19, 86 |
| France | 9.50 | 9.50 | 9.50 | 9.50 | 9.50 | 9.50 | 9.50 | 9.50 | 9.50 | Aug 31, 77 |
| Germany | 4.50 | 4.00 | 3.50 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | Jan 23, 87 |
| Ireland | 14.00 | 10.25 | 13.25 | 13.25 | 12.75 | 11.75 | 11.25 | 10.25 | 10.25 | Jul 16, 87 |
| Italy | 16.50 | 15.00 | 12.00 | 11.50 | 11.50 | 11.50 | 11.50 | 11.50 | 12.00 | Aug 28, 87 |
| Netherlands | 5.00 | 5.00 | 4.50 | 4.50 | 4.50 | 4.50 | 4.50 | 4.50 | 4.50 | Mar 7, 86 |
| Norway | 8.00 | 8.00 | 8.00 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | Jun 6, 83 |
| Portugal | 25.00 | 19.00 | 16.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | 15.00 | Mar 23, 87 |
| Spain | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | Jul 26, 77 |
| Sweden | 9.50 | 10.50 | 7.50 | 7.50 | 7.50 | 7.50 | 7.50 | 7.50 | 7.50 | Sep 19, 86 |
| Switzerland | 4.00 | 4.00 | 4.00 | 3.50 | 3.50 | 3.50 | 3.50 | 3.50 | 3.50 | Jan 22, 87 |
| United Kingdom | 9.38 | 11.31 | 10.81 | 9.81 | 9.31 | 8.87 | 8.87 | 8.87 | 9.87 | Aug 7, 87 |
| Japan | 5.00 | 5.00 | 3.00 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | Feb 23, 87 |
| New Zealand | 13.50 | 19.80 | 24.60 | 28.20 | 28.40 | 21.35 | 20.00 | n.a. | 20.00 | Jun, 87 |
| South Africa | 21.75 | 13.50 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | Dec 10, 86 |
| Argentina* | 18.19 | 5.00 | 11.19 | 6.25 | 9.00 | 9.00 | 10.50 | 12.80 | 12.80 | Jul, 87 |
| Korea | 5.00 | 5.00 | 7.00 | 7.00 | 7.00 | 7.00 | 7.00 | 7.00 | 7.00 | Jul 10, 86 |
| Philippines | 12.11 | 11.50 | 9.64 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | Dec, 86 |
| Singapore | 6.75 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | 5.00 | Jul, 85 |
| Thailand | 12.00 | 11.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | Sep 1, 86 |
| Venezuela | 11.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | Mar, 85 |

*Percent per month.

# Day-to-day money rates

*monthly averages*

| | 1983 | 1984 | 1985 | 1986 | 1987 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dec | Dec | Dec | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul |
| United States | 9.47 | 8.38 | 8.27 | 6.71 | 6.43 | 5.45 | 6.13 | 6.37 | 6.85 | 6.73 | 6.58 |
| Canada | 8.78 | 10.50 | 9.23 | 8.28 | 8.03 | 7.22 | 7.16 | 7.10 | 7.41 | 8.35 | 8.53 |
| Austria | 5.75 | 7.63 | 7.25 | 7.62 | 4.25 | 4.25 | 4.12 | 4.25 | 3.80 | 3.95 | 4.10 |
| Belgium | 7.39 | 9.12 | 6.60 | 5.09 | 7.75 | 6.90 | 5.83 | 5.65 | 5.60 | 5.65 | 5.65 |
| Finland | 16.70 | 15.07 | 11.96 | 11.97 | 11.99 | 11.76 | 11.44 | 11.14 | 11.00 | 11.00 | 11.00 |
| France | 12.27 | 10.95 | 9.02 | 7.80 | 8.90 | 8.36 | 7.89 | 7.91 | 8.02 | 8.01 | 7.46 |
| Germany | 5.61 | 5.62 | 4.64 | 5.00 | 4.24 | 3.83 | 3.84 | 3.75 | 3.69 | 3.61 | 3.70 |
| Ireland | 12.19 | 14.50 | 9.62 | 13.00 | 13.36 | 13.94 | 13.75 | 13.25 | 12.00 | 11.00 | 9.00 |
| Italy | 17.88 | 17.25 | 14.75 | 11.42 | 11.88 | 11.81 | 11.22 | 10.56 | 10.25 | 10.78 | n.a. |
| Netherlands | 5.84 | 5.60 | 5.75 | 6.19 | 6.20 | 5.31 | 5.56 | 5.19 | 5.20 | 5.19 | 5.25 |
| Norway | 12.30 | 12.50 | 12.50 | 14.00 | 14.00 | 14.00 | 14.00 | 14.00 | 14.00 | 14.00 | n.a |
| Spain | 16.98 | 12.18 | 9.92 | 11.76 | 12.21 | 12.47 | 14.43 | 17.32 | 20.18 | 18.12 | 18.09 |
| Sweden | 11.52 | 11.88 | 11.83 | 8.89 | 9.09 | 11.73 | 12.02 | 8.70 | 8.00 | 8.00 | 8.50 |
| Switzerland | 1.88 | 1.50 | 2.00 | 1.12 | 1.00 | 1.00 | 1.00 | 1.75 | 1.37 | 2.25 | 2.00 |
| United Kingdom | 7.78 | 8.31 | 9.72 | 9.19 | 11.06 | 10.88 | 10.30 | 9.61 | 8.78 | 9.16 | 8.78 |
| Australia | 4.55 | 10.98 | 18.37 | 15.40 | 15.73 | 16.22 | 16.05 | 14.71 | 13.45 | 12.79 | 12.06 |
| Japan | 6.44 | 6.41 | 8.02 | 4.18 | 4.09 | 4.05 | 3.85 | 3.52 | 3.16 | 3.16 | 3.17 |
| South Africa | 16.06 | 21.13 | 12.50 | 8.50 | 9.00 | 8.50 | 8.37 | 8.31 | 8.37 | 8.00 | 8.56 |
| Argentina* | 14.65 | 17.75 | 4.50 | 7.00 | 7.00 | 4.00 | 5.32 | 5.50 | 6.00 | 8.00 | 9.00 |
| Brazil | 184.69 | 272.02 | 352.23 | 83.05 | 270.00 | 412.00 | 408.00 | 853.00 | n.a. | n.a. | n.a. |
| Hong Kong | 13.90 | 6.80 | 6.10 | 3.90 | 2.78 | 1.97 | 3.76 | 4.11 | 4.20 | 6.45 | 5.33 |
| Korea | 11.40 | 10.00 | 8.80 | 9.00 | 8.50 | 8.60 | 8.80 | 8.40 | 8.50 | 8.90 | 8.90 |
| Philippines | 31.18 | 15.22 | 15.03 | n.a. | n.a. | 6.44 | 13.79 | 13.29 | n.a. | n.a. | n.a. |
| Singapore | 7.05 | 6.01 | 4.53 | 3.51 | 3.10 | 3.22 | 2.24 | 3.31 | 4.39 | 2.57 | 3.33 |
| Taiwan | 7.65 | 8.07 | 4.50 | 3.00 | 3.25 | 3.25 | 3.10 | 3.50 | 3.50 | 3.50 | 5.50 |

*Percent per month.

# Treasury bill rates

*bond equivalent yields, at or near end of month*

| | 1983 | 1984 | 1985 | 1986 | 1987 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dec | Dec | Dec | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul |
| United States | 9.28 | 7.99 | 7.25 | 5.73 | 5.66 | 5.48 | 5.76 | 5.61 | 5.82 | 5.90 | 6 11 |
| Canada | 9.71 | 9.84 | 9.24 | 8.22 | 7.24 | 7.28 | 6 80 | 8.08 | 8.19 | 8.29 | 8 97 |
| Belgium | 11.00 | 10.90 | 9.89 | 7.50 | 7.99 | 7.86 | 7.50 | 7.35 | 7.15 | 6.84 | 6.74 |
| Ireland | 12.01 | 15.10 | 11.15 | 13.60 | 13 91 | 13 67 | 13 51 | 11.29 | 10.86 | 10 46 | 9 56 |
| Italy | 16.29 | 14.19 | 12.70 | 10 00 | 9.94 | 9.74 | 9.66 | 9.60 | 9 60 | 9.60 | 10.53 |
| Netherlands | 5.63 | 5.88 | 5.69 | 6.37 | 5.94 | 5.87 | 5.44 | 5.31 | 5.31 | 4.75 | 5 25 |
| Spain | 15.27 | 12.27 | 9.52 | 8.37 | 6.94 | 7.67 | n.t. | 9.61 | 10 40 | 9.59 | 8 61 |
| Sweden | 11.75 | 11.83 | 12.49 | 9.20 | 10.25 | 10.80 | 10 31 | 9.25 | 9.16 | 8.60 | 9.11 |
| United Kingdom | 9.04 | 9.33 | 11.49 | 10.79 | 10.59 | 10.46 | 9.54 | 9.39 | 8.68 | 8.96 | 9.14 |
| Australia | 8.54 | 12.27 | 19.40 | 14 91 | 16.64 | 16.32 | 15 47 | 14.00 | 13.01 | 12.23 | 12.04 |
| Japan | 4.91 | 4.91 | 4.91 | 2.89 | 2.89 | 2.89 | 2 38 | 2.38 | 2.38 | 2.38 | 2 38 |
| New Zealand | 7.80 | 13.50 | 17.62 | 19.69 | 22.36 | 25.38 | 24.70 | 25.29 | 19 48 | n.a. | n.a. |
| South Africa | 18.43 | 21.94 | 12.99 | 8.84 | 8.77 | 8.78 | 8 26 | 8.60 | 8.96 | 8.64 | 8.74 |
| Brazil | 179.15 | 273.03 | 379.77 | 149.00 | 276.40 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Mexico | 53.78 | 48.67 | 72.98 | 104.03 | 104.64 | 104.83 | 100.66 | 99.01 | 98.60 | 98.40 | 96.86 |
| Philippines | 15.99 | 47.14 | 16.45 | n.a. | n.a. | 7.71 | 11.76 | 11.80 | n.a. | n.a. | n.a. |
| Singapore | 2.59 | 2.91 | 2.94 | 2.10 | 2.19 | 1.67 | 1.93 | 2.12 | 2.61 | 2.63 | 2.97 |

# Representative money market rates

*bond-equivalent yields on major short-term (mostly 3-4 month) money market instruments other than Treasury bills, at or near end of month*

| | 1983 | 1984 | 1985 | 1986 | 1987 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dec | Dec | Dec | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul |
| United States | 9.89 | 8.34 | 8.01 | 8 04 | 6 97 | 6.24 | 6.70 | 6.98 | 7.12 | 7.10 | 6.98 |
| Canada | 9.85 | 10.00 | 9.40 | 8.35 | 7.45 | 7.40 | 6.90 | 8.15 | 8.30 | 8.45 | 9.20 |
| Belgium | 11.15 | 10.85 | 9.89 | 7.60 | 7.86 | 7.81 | 7 50 | 7.40 | 7.25 | 7.00 | 6.84 |
| France | 12.19 | 10.69 | 9.12 | 8.37 | 8.50 | 8.25 | 7.87 | 8.00 | 8.12 | 8.12 | 7.87 |
| Germany | 6.30 | 5.75 | 4.80 | 4 85 | 3.90 | 3 85 | 3 85 | 3.80 | 3.65 | 3.65 | 3.85 |
| Ireland | 12.19 | 15.13 | 12.00 | 14.06 | 14 12 | 14.25 | 13.37 | 10.87 | 11.19 | 10.50 | 9.87 |
| Italy | 17.88 | 16.88 | 15.13 | 11 37 | 11.37 | 11.12 | 10.12 | 10.00 | 10.50 | 11 00 | 11.12 |
| Netherlands | 6.00 | 5.75 | 5.75 | 6.19 | 5.44 | 5.50 | 5.55 | 5.31 | 5.25 | 5.25 | 5.37 |
| Portugal | 24.11 | 24.57 | 20.71 | 16 07 | 14 95 | 14 94 | 14.95 | 14.96 | 15.03 | n.a. | n.a. |
| Spain | 19.00 | 12.21 | 10.51 | 11.79 | 12.35 | 12 60 | 14.60 | 17.09 | 19 80 | 18.29 | 17.56 |
| Switzerland | 3.88 | 5.00 | 4.75 | 4.50 | 3.75 | 4.00 | 3 87 | 3.75 | 3.87 | 3.81 | 3.94 |
| United Kingdom | 9.31 | 9.88 | 12.75 | 11.25 | 11.12 | 10.19 | 10 06 | 9.25 | 9.00 | 9.25 | 9.44 |
| Australia | 9.05 | 12.90 | 19.75 | 15.10 | 16.40 | 16 60 | 16.27 | 14.50 | 13.80 | 13 45 | 12.80 |
| Japan | 6.45 | 6.33 | 7.03 | 4.34 | 4.22 | 3.96 | 3 98 | 3.89 | 3.70 | 3.75 | 3.74 |
| New Zealand | 11.75 | 15.00 | 20.00 | 24.25 | 23.60 | 25.15 | 25.60 | 25.70 | 20.35 | n.a. | n.a. |
| South Africa | 19.12 | 22.78 | 13.35 | 8.55 | 9.20 | 9.05 | 8.40 | 9.10 | 9.00 | 8.80 | 8.80 |
| Chile | 20.68 | 20.68 | 22.42 | 19.56 | 25.34 | 25 34 | 23 87 | 22.42 | 28.32 | 14.03 | 18.16 |
| Hong Kong | 14.88 | 8.25 | 6.50 | 4.62 | 3 44 | 4.37 | 4 87 | 5.50 | 6.25 | 6.87 | 6.19 |
| Indonesia | 19.50 | 19.00 | 15.00 | 19.50 | 16.50 | 16.00 | 17 00 | 16.50 | 18.00 | 27 00 | n a. |
| Korea | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8 00 | 8 00 | 8.00 | 8.00 | 8.00 | 8.00 |
| Malaysia | 9.80 | 10.30 | 8.20 | 6.00 | 5.30 | 3.30 | 2.60 | 2.70 | 2.80 | 2.75 | n a. |
| Philippines | 15.61 | 33.21 | 14.61 | 8 31 | 8 34 | 7.05 | 8.72 | 10 05 | n.a. | n.a. | n.a. |
| Singapore | 8.44 | 7.00 | 5 88 | 3 94 | 3.34 | 3 31 | 3.26 | 3.73 | 4.44 | 4.31 | 4 13 |
| Taiwan | 8.07 | 7.85 | 4.10 | 3.87 | 4.31 | 3.67 | 3.56 | 3.57 | 3.48 | 4.36 | 4.72 |
| Thailand | 16.00 | 12.00 | 15.50 | 7.75 | 7.75 | 7.75 | 7.75 | 7.75 | 7.75 | 7.75 | n.a. |

# Commercial bank deposit rates

*at or near end of month*

| | 1983 | 1984 | 1985 | 1986 | 1987 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dec | Dec | Dec | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul |
| United States | 9.70 | 8.35 | 7.75 | 6.30 | 6.00 | 6.13 | 6.30 | 6.60 | 7.05 | 6.90 | 6.77 |
| Canada | 9.82 | 10.05 | 9.40 | 8.15 | 7.50 | 7.40 | 7.00 | 8.25 | 8.45 | 8.50 | n.a. |
| Austria | 6.50 | 7.50 | 6.50 | 5.50 | 5.12 | 4.75 | 4.50 | 4.37 | 4.15 | 4.15 | 4.25 |
| Belgium | 11.25 | 10.63 | 9.63 | 7.44 | 7.75 | 7.69 | 7.37 | 7.19 | 7.00 | 6.56 | 6.19 |
| Denmark | 6.00 | 6.00 | 7.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 |
| Finland | 5.25 | 5.25 | 4.75 | 2.75 | 2.75 | 2.75 | 2.75 | 2.75 | 2.75 | 2.75 | 2.75 |
| France | 7.66 | 7.04 | 6.12 | 4.50 | 4.50 | 4.50 | 4.50 | 4.50 | 4.50 | 4.50 | 4.50 |
| Germany | 5.90 | 5.25 | 4.40 | 4.80 | 4.70 | 3.90 | 3.95 | 3.95 | 3.85 | 3.75 | 3.75 |
| Ireland | 11.75 | 14.63 | 11.87 | 13.75 | 14.00 | 14.00 | 13.25 | 10.75 | 11.00 | 10.25 | 9.62 |
| Italy | 13.25 | 11.64 | 11.85 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Netherlands | 6.13 | 5.69 | 5.81 | 6.06 | 5.31 | 5.37 | 5.37 | 5.25 | 5.12 | 5.12 | 5.25 |
| Norway | 12.75 | 12.75 | 12.00 | 15.00 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Portugal | 21.50 | 28.00 | 20.00 | n.a. | 15.00 | 15.00 | 14.50 | 14.50 | 14.50 | n.a. | n.a. |
| Spain | 12.62 | 11.64 | 9.64 | 8.67 | 8.54 | 8.57 | 8.58 | 8.60 | 8.87 | 9.04 | n.a. |
| Sweden | 11.70 | 11.45 | 12.18 | 9.93 | 10.30 | 11.00 | 10.75 | 9.75 | 10.00 | 9.00 | 9.25 |
| Switzerland | 3.50 | 4.50 | 4.50 | 4.25 | 3.50 | 3.75 | 3.62 | 3.50 | 3.62 | 3.56 | 3.69 |
| United Kingdom | 9.31 | 9.88 | 11.75 | 11.19 | 11.00 | 10.59 | 9.84 | 9.25 | 8.81 | 9.25 | 9.31 |
| Australia | 10.40 | 12.75 | 18.80 | 15.56 | 15.73 | 16.62 | 16.19 | 15.21 | 14.42 | n.a. | n.a. |
| Japan | 6.40 | 6.38 | 7.05 | 4.55 | 4.16 | 4.17 | 4.20 | 4.11 | 3.88 | 3.99 | 4.09 |
| New Zealand | 11.75 | 15.25 | 19.98 | 23.50 | 22.72 | 23.70 | 23.30 | 23.85 | 20.00 | n.a. | n.a. |
| South Africa | 20.13 | 22.88 | 13.20 | 8.65 | 9.50 | 9.25 | 8.75 | 9.15 | 9.25 | 9.00 | 9.00 |
| Argentina* | 14.50 | 31.23 | 5.40 | 8.41 | 8.81 | 4.43 | 4.86 | 7.17 | 7.81 | 7.96 | 10.24 |
| Brazil** | 23.00 | 27.00 | 18.00 | 220.00 | 400.00 | 32.00 | 30.00 | 24.00 | n.a. | n.a. | n.a. |
| Chile | 20.57 | 20.68 | 23.60 | 20.98 | 26.97 | 27.42 | 24.31 | 25.93 | 18.00 | 17.00 | 11.00 |
| Hong Kong | 14.88 | 8.25 | 6.50 | 4.62 | 3.44 | 4.37 | 4.87 | 5.50 | 6.25 | 6.87 | 6.19 |
| Korea | 7.60 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 | 6.00 |
| Malaysia | 7.75 | 9.58 | 7.00 | 6.33 | 4.83 | 4.66 | 2.33 | 2.43 | 2.35 | 2.42 | n.a. |
| Mexico | 57.15 | 47.45 | 2.90 | 94.30 | 94.30 | 94.30 | 94.30 | 94.30 | 94.30 | 94.30 | 94.30 |
| Philippines | 14.96 | 31.01 | 12.34 | n.a. | n.a. | 6.68 | 6.13 | 7.96 | n.a. | n.a. | n.a. |
| Singapore | 7.44 | 6.13 | 5.26 | 3.63 | 3.19 | 3.32 | 3.32 | 3.63 | n.a. | n.a. | n.a. |
| Taiwan | 7.00 | 6.50 | 5.25 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 | 4.00 |
| Thailand | 10.00 | 13.00 | 10.50 | 6.75 | 6.75 | 6.75 | 6.75 | 6.75 | 6.75 | 6.75 | n.a. |
| Venezuela | 12.00 | 12.50 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 | 8.00 |

*Percent per month.

# Domestic government bond yields

*long-term issues, at or near end of month*

| | 1983 | 1984 | 1985 | 1986 | 1987 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dec | Dec | Dec | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul |
| United States | 12.00 | 11.61 | 9.49 | 7.79 | 7.47 | 7.48 | 7.81 | 8.45 | 8.65 | 8.50 | 8.88 |
| Canada | 12.02 | 11.66 | 10.04 | 9.23 | 8.94 | 9.10 | 8.98 | 9.82 | 9.92 | 9.78 | 10.23 |
| Austria | 8.02 | 8.04 | 7.61 | 7.33 | 7.25 | 7.05 | 6.93 | 6.86 | 6.74 | 6.61 | 6.68 |
| Belgium | 11.89 | 11.56 | 9.60 | 7.70 | 7.57 | 7.57 | 7.64 | 7.66 | 7.76 | 7.82 | 7.64 |
| Denmark | 12.96 | 14.60 | 9.67 | 11.70 | 11.33 | 12.63 | 12.23 | 11.96 | 11.87 | 12.06 | 12.18 |
| Finland | 11.16 | 10.73 | 10.58 | 7.80 | 7.78 | 7.82 | 7.89 | 7.77 | 7.88 | 7.85 | 7.86 |
| France | 13.96 | 12.70 | 11.33 | 9.89 | 9.54 | 9.84 | 9.42 | 9.51 | 9.86 | 10.40 | 10.39 |
| Germany | 8.38 | 7.17 | 6.57 | 6.25 | 6.20 | 6.26 | 6.12 | 5.98 | 5.99 | 6.31 | 6.39 |
| Ireland | 14.24 | 14.90 | 11.84 | 12.97 | 12.64 | 12.41 | 11.16 | 10.47 | 10.92 | 10.93 | 11.81 |
| Italy | 17.69 | 14.52 | 13.66 | 10.05 | 9.78 | 9.84 | 10.03 | 10.08 | 10.20 | 10.41 | 10.90 |
| Netherlands | 8.58 | 7.72 | 6.96 | 6.40 | 6.21 | 6.15 | 6.22 | 6.12 | 6.07 | 6.26 | 6.43 |
| Norway | 12.50 | 12.00 | 13.00 | 13.24 | 13.21 | 13.03 | 13.20 | 12.96 | 13.08 | 13.11 | n.a. |
| Portugal | 22.11 | 22.23 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Spain | 17.25 | 13.93 | 12.30 | 10.36 | 10.74 | 10.59 | 10.95 | 12.04 | 13.43 | 13.20 | 13.56 |
| Sweden | 12.30 | 12.04 | 12.11 | 10.66 | 11.70 | 11.23 | 10.70 | 11.07 | 11.77 | 11.37 | 11.79 |
| Switzerland | 4.53 | 4.60 | 4.42 | 4.05 | 3.93 | 4.01 | 4.04 | 4.03 | 4.07 | 4.02 | 4.09 |
| United Kingdom | 9.94 | 10.25 | 10.35 | 10.17 | 10.64 | 9.51 | 9.15 | 8.87 | 8.79 | 9.15 | 9.69 |
| Australia | 13.65 | 13.50 | 14.85 | 13.40 | 13.80 | 14.00 | 13.45 | 13.05 | 13.00 | 12.80 | 12.95 |
| Japan | 6.94 | 6.30 | 5.82 | 4.61 | 4.25 | 3.96 | 3.72 | 3.42 | 3.38 | 3.91 | 4.44 |
| New Zealand | 10.50 | 16.90 | 17.00 | 16.00 | 16.20 | 16.80 | 16.30 | 15.95 | 15.65 | 15.45 | n.a. |
| South Africa | 13.64 | 16.55 | 18.09 | 15.06 | 15.33 | 15.30 | 14.66 | 15.30 | 15.70 | 15.60 | 15.18 |
| Philippines | 14.47 | 18.54 | n.t. | n.t. | n.t. | n.t. | n.t. | n.t. | n.a. | n.a. | n.a. |
| Venezuela | 13.50 | 14.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 |

# Commercial bank lending rates to prime borrowers

*at or near end of month*

| | 1983 | 1984 | 1985 | 1986 | 1987 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dec | Dec | Dec | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul |
| United States | 11.00 | 10.75 | 9.50 | 7.50 | 7.50 | 7.50 | 7.50 | 7.75 | 8.25 | 8.25 | 8.25 |
| Canada | 11.00 | 11.25 | 10.00 | 9.75 | 9.25 | 9.25 | 8.75 | 9.25 | 9.50 | 9.50 | 9.50 |
| Austria | 9.25 | 9.25 | 9.00 | 9.00 | 9.00 | 8.75 | 8.75 | 8.75 | 8.75 | 8.50 | 8.50 |
| Belgium | 13.75 | 14.00 | 11.50 | 9.75 | 10.75 | 10.25 | 9.75 | 9.75 | 9.25 | 9.25 | 8.75 |
| Denmark | 10.00 | 10.50 | 8.50 | 8.00 | 9.50 | 10.00 | 10.00 | 10.00 | 10.00 | 9.50 | 9.50 |
| Finland | 10.18 | 10.68 | 10.37 | 8.81 | 8.81 | 8.80 | 8.84 | 8.86 | 8.89 | 8.91 | n.a. |
| France | 12.25 | 12.00 | 10.60 | 9.45 | 9.45 | 9.45 | 9.45 | 9.45 | 9.45 | 9.45 | 9.45 |
| Germany | 7.75 | 7.75 | 7.25 | 6.75 | 6.75 | 6.25 | 6.25 | 6.25 | 6.25 | 6.25 | 6.25 |
| Ireland | 13.75 | 15.75 | 12.50 | 15.75 | 15.75 | 15.75 | 15.75 | 15.25 | 14.25 | 13.75 | 12.75 |
| Italy | 18.75 | 18.00 | 15.88 | 13.00 | 13.00 | 13.00 | 12.50 | 12.50 | 12.50 | 12.50 | 12.50 |
| Netherlands | 7.00 | 6.25 | 6.25 | 7.12 | 6.12 | 5.75 | 5.87 | 5.75 | 5.62 | 5.62 | 5.62 |
| Norway | 13.50 | 13.00 | 12.40 | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. |
| Portugal | 30.00 | 29.00 | 22.50 | 17.50 | 17.50 | 17.50 | 19.50 | 19.50 | 19.50 | n.a. | n.a. |
| Spain | 17.31 | 15.84 | 14.75 | 14.22 | 14.24 | 14.24 | 14.57 | 15.23 | 16.21 | 16.51 | 16.62 |
| Sweden | 13.50 | 14.50 | 15.05 | 11.50 | 11.50 | 11.50 | 11.50 | 11.50 | 11.50 | 11.50 | 11.50 |
| Switzerland | 6.00 | 6.00 | 6.00 | 5.75 | 5.25 | 5.25 | 5.25 | 5.00 | 5.00 | 5.00 | 5.00 |
| United Kingdom | 9.00 | 9.50 | 11.50 | 11.00 | 11.00 | 11.00 | 10.00 | 9.50 | 9.00 | 9.00 | 9.00 |
| Australia | 12.75 | 14.00 | 21.00 | 18.25 | 18.00 | 18.25 | 18.25 | 17.50 | 16.75 | 15.75 | 15.25 |
| Japan | 5.89 | 5.70 | 5.71 | 4.35 | 4.28 | 4.24 | 4.12 | 4.00 | 3.90 | n.a. | n.a. |
| New Zealand | 11.00 | 14.00 | 21.00 | 18.50 | 24.00 | 25.00 | 27.00 | 29.00 | 22.50 | 22.00 | 21.00 |
| South Africa | 20.00 | 24.00 | 16.50 | 12.00 | 12.50 | 12.50 | 12.50 | 12.50 | 12.50 | 12.50 | 12.50 |
| Argentina* | 15.50 | 32.05 | 7.30 | 11.30 | 9.85 | 5.45 | 5.71 | 9.20 | 8.50 | 9.65 | 13.20 |
| Brazil** | 24.00 | 31.00 | 19.00 | 250.00 | 440.00 | 45.00 | 40.00 | 37.00 | n.a. | n.a. | n.a. |
| Chile | 30.90 | 60.82 | 33.34 | 29.13 | 33.57 | 36.07 | 34.48 | 36.07 | 40.27 | 30.91 | 27.11 |
| Hong Kong | 13.50 | 11.00 | 7.00 | 6.50 | 5.00 | 5.00 | 6.00 | 6.50 | 6.50 | 7.50 | 7.50 |
| Indonesia | 19.75 | 23.50 | 18.75 | 19.75 | 20.50 | 19.50 | 19.50 | 19.25 | 19.75 | 26.00 | 26.00 |
| Korea | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 | 10.00 |
| Malaysia | 11.00 | 12.00 | 10.50 | 10.00 | 9.00 | 9.00 | 9.00 | 8.50 | 8.50 | 7.75 | n.a. |
| Mexico | 56.44 | 47.54 | 65.66 | 95.33 | 95.89 | 96.20 | 96.25 | 95.79 | 94.79 | 93.76 | 92.91 |
| Philippines | 18.00 | 44.00 | 15.00 | 10.00 | 9.88 | 8.75 | 8.53 | 8.55 | 9.31 | 9.50 | n.a. |
| Singapore | 8.98 | 9.40 | 7.20 | 6.10 | 6.10 | 6.10 | 6.10 | 6.10 | 6.10 | 6.10 | 6.10 |
| Taiwan | 10.25 | 10.00 | 9.50 | 9.00 | 9.00 | 9.00 | 9.00 | 9.00 | 9.00 | 9.00 | 9.00 |
| Thailand | 16.00 | 16.50 | 15.50 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | 12.00 | n.a. |
| Venezuela | 16.00 | 16.00 | 13.00 | 13.00 | 13.00 | 13.00 | 13.00 | 13.00 | 13.00 | 13.00 | 13.00 |

*Percent per month.

**Spread above monetary correction until Feb 86; nominal rate of interest until Jan 87; spread above LBC rate thereafter.

# Domestic corporate bond yields

*long-term issues, at or near end of month*

| | 1983 | 1984 | 1985 | 1986 | 1987 | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Dec | Dec | Dec | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul |
| United States | 12.63 | 12.25 | 10.15 | 8.88 | 8.50 | 8.55 | 8.65 | 9.60 | 9.55 | 9.55 | 9.90 |
| Canada | 12.89 | 12.42 | 10.74 | 10.18 | 9.67 | 9.90 | 9.79 | 10.44 | 10.44 | 10.46 | 11.05 |
| France | 14.35 | 12.94 | 11.76 | 10.18 | 9.92 | 10.06 | 9.79 | 9.82 | 10.05 | 10.38 | 10.37 |
| Germany | 8.30 | 7.20 | 6.90 | 6.50 | 6.50 | 6.40 | 6.60 | 6.50 | 6.40 | 6.50 | 6.60 |
| Netherlands | 8.51 | 7.51 | n.t. | n.t. | n.t. | n.t. | n.t. | n.t. | n.t. | n.t. | n.t. |
| Norway | 13.25 | 12.75 | 14.00 | 14.94 | n.a. | n.a. | 16.37 | 15.47 | 14.22 | 16.21 | n.a. |
| Spain | 20.07 | 18.32 | 14.92 | 13.40 | 13.72 | 14.13 | 14.82 | 15.52 | 15.76 | 16.39 | 16.94 |
| Sweden | 12.21 | 12.33 | 13.25 | 11.99 | 13.00 | 12.63 | 12.15 | 12.15 | 12.89 | 12.47 | 12.68 |
| Switzerland | 4.92 | 5.09 | 4.93 | 4.72 | 4.62 | 4.56 | 4.58 | 4.57 | 4.56 | 4.56 | 4.53 |
| United Kingdom | 11.57 | 11.64 | 11.47 | 11.71 | 11.30 | 10.58 | 10.21 | 10.09 | 10.19 | 10.15 | 10.55 |
| Japan | 7.49 | 7.11 | 6.79 | 5.93 | 5.46 | 5.35 | 5.20 | 4.99 | 4.71 | 5.20 | n.a. |
| Korea | 14.20 | 15.00 | 13.60 | 12.80 | 12.80 | 12.70 | 13.00 | 13.00 | 12.70 | 12.70 | 12.70 |
| Venezuela | 18.00 | 18.00 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 | 17.00 |

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